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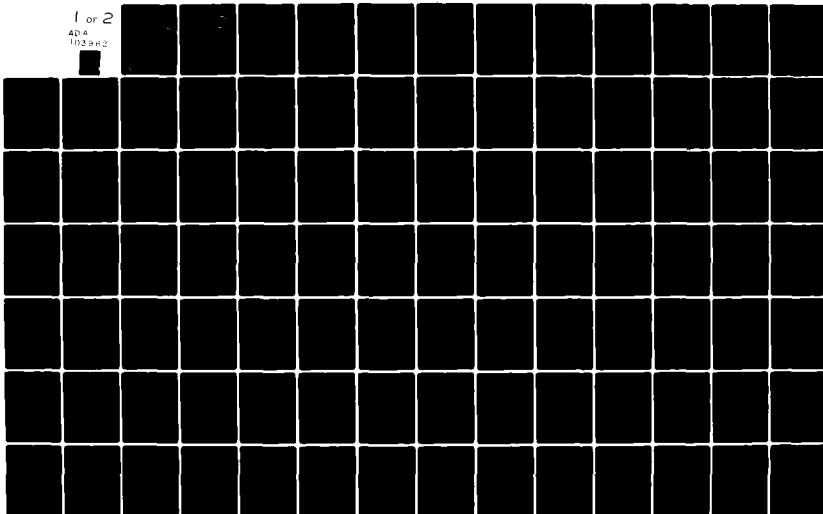
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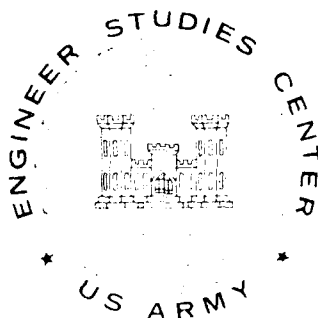
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VOLUME II



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This study assesses the current methodology for studying potential Army realignment actions and recommends a system for tracking actions once they are implemented. Based on literature search, tracking of past actions, and surveys of informed experts, the current Army realignment study process was rated very highly and found in need of only a few minor improvements. The major recommendation was to replace the quarterly status report system with an after action report requirement.		

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LIST OF ABBREVIATIONS

AAA.....Army Audit Agency
 AD.....Army Depot
 ADA.....air defense artillery
 AFB.....Air Force Base
 AFCE-2.....Army Forces Command finance and accounting report
 AFCE-17.....Army Forces Command finance and accounting report
 AG.....Adjutant General
 AIF.....Army Industrial Fund
 AIT.....Advanced Individual Training
 AMC.....United States Army Materiel Command (now termed United States
 Army Materiel Development and Readiness Command (DARCOM))
 AMS.....Army Management Structure
 AR.....Army Regulation
 ARSTAF.....Army Staff

 BASOPS.....Base Operations
 BCT.....Basic Combat Training
 bde.....brigade
 BEA.....Bureau of Economic Analysis, Department of Commerce
 bn.....battalion
 BOM.....Bills of Materials

 CDC.....United States Army Combat Developments Command (now termed
 United States Army Combat Developments Experimentation
 Command (USACDEC))
 CERL.....Construction Engineering Research Laboratory
 CFAIA.....Craig Field Airport and Industrial Authority
 CHAMPUS.....Civilian Health and Medical Program of the Uniformed Services
 civ.....civilian
 COA.....Comptroller of the Army
 COB.....Command Operating Budget
 COE.....Chief of Engineers
 Compt Gen
 of the US....Comptroller General of the United States
 CONARC.....Continental Army Command (now termed United States Army Forces
 Command (FORSCOM))
 CONUS.....Continental United States
 CPM.....Critical Path Method
 CSA.....Chief of Staff, Army
 CSFOR-78.....United States Army Training and Developments Command finance
 and accounting report
 CSJF.....Case Study Justification Folder
 CST.....Combat Support Training
 CY.....Calendar Year

 DA.....Department of the Army
 DAF.....Department of the Air Force
 DARCOM.....United States Army Materiel Development and Readiness Command
 DCS.....Deputy Chief of Staff

DCSCOMPT.....Deputy Chief of Staff, Comptroller
 DCSLOG.....Deputy Chief of Staff for Logistics
 DCSOPS.....Deputy Chief of Staff for Operations and Plans
 DCSPER.....Deputy Chief of Staff for Personnel
 DCSRDA.....Deputy Chief of Staff for Research, Development, and
 Acquisition
 DEIS.....Draft Environmental Impact Statement
 DESCOM.....United States Army Depot System Command
 DF.....Disposition Form
 DM.....Management Directorate
 DOD.....Department of Defense

 EA.....Environmental Assessment
 EAC.....Economic Adjustment Committee
 EEO.....Equal Employment Opportunity
 EIFS.....Economic Impact Forecast System
 EIPO.....Engineering and Installation Project Office
 EIS.....Environmental Impact Statement
 EM.....Enlisted Man (men)
 ES.....End Strength
 ESC.....Engineer Studies Center
 ETIS.....Environmental Technical Information System

 F&A.....Finance and Accounting
 fac.....facility
 FAPAB.....FORSCOM Command Operating Program Detailed Guidance
 FEIS.....Final Environmental Impact Statement
 FHMA.....Family Housing Management Account
 FNSI.....Finding of No Significant Impact
 FORSCOM.....United States Army Forces Command
 FY.....Fiscal Year
 FYDP.....Five Year Defense Program

 GAO.....General Accounting Office
 GSA.....Government Services Administration

 HAAF.....Hunter Army Airfield
 HBR.....Harvard Business Review
 HHG.....household goods
 HQAF.....Headquarters, Department of the Air Force
 HQDA.....Headquarters, Department of the Army
 HSC.....United States Army Health Services Command

 I-Hawk.....improved Hawk
 IL&FM.....Installations, Logistics, and Financial Management
 INSCOM.....Intelligence and Security Command

 k.....thousand

 LECS.....Local Economic Consequences Model
 LOI.....Letter of Implementation/Letter of Instruction

MACOM.....major Army command
 MAJCOM.....major Air Force command
 MCA.....Military Construction, Army
 MFR.....Memorandum for Record
 MG.....Major General
 mil.....military
 MILPERCEN.....Military Personnel Center
 MOI.....Military Occupational Information
 MP.....Military Police
 MPA.....Military Personnel, Army
 MY.....Man-year

 NAF.....Nonappropriated Funds
 NAS.....Naval Air Station
 NEPA.....National Environmental Policy Act

 O&M.....Operation and Maintenance
 OASD(I&L).....Office of Secretary of Defense (Installations and Logistics)
 OASD(MRA&L).....Office of the Secretary of Defense (Manpower, Reserve
 Affairs and Logistics)
 OCE.....Office of the Chief of Engineers
 OCSA.....Office of the Chief of Staff, Army
 off.....officer
 OMA.....Operation and Maintenance, Army
 OMB.....Office of Management and Budget
 OPLAN.....operations plan
 OSD.....Office of the Secretary of Defense
 OSUT.....One-Station Unit Training

 PCS.....Permanent Change of Station
 PERT.....Program Evaluation and Review Technique

 R&DTE.....Research Development Testing and Evaluation
 RIMS.....Regional Industrial Multiplier System
 RRSR.....Realignment Resource Summary Report

 SA.....Secretary of the Army
 SAG.....Study Advisory Group
 SECDEF.....Secretary of Defense
 SOP.....Standing Operating Procedure
 STANFINS.....Standard Finance System
 STRAF.....Strategic Army Forces

 TD.....Tables of Distribution
 TDA.....Table(s) of Distribution and Allowances
 TDY.....Temporary Duty
 TOE.....Table(s) of Organization and Equipment
 TRADOC.....United States Army Training and Doctrine Command

 USAAA.....United States Army Audit Agency
 USAAC.....United States Army Aviation Command

USAAVNS.....United States Army Aviation School
USACC.....United States Army Communications Command
USACE.....United States Army Corps of Engineers
USACES.....United States Army Communications Electronics School
USACSA.....United States Army Communications Systems Agency
USAF.....United States Air Force
USAMC.....United States Army Materiel Command
USAMPS.....United States Army Military Police School
USAPHS.....United States Army Primary Helicopter School
USASIGS.....United States Army Signal School
USWACCS.....United States Women/s Army Corps Center and School

VHFS.....Vint Hill Farm Station
VOLAR.....Volunteer Army

ANNEX F

ESC CASE HISTORY RESEARCH

ANNEX F

ESC CASE HISTORY RESEARCH

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1. Purpose. This annex describes the ESC case history research effort and then presents the results of that research in the form of six documented case histories of completed realignment actions. When the ESC study team undertook this project, it determined that the first phase would be to review a series of case studies of previous realignment actions to get a thorough grounding in the details and problems associated with developing and tracking

a realignment action. The product of this phase was to be a data base which included information about the various commands' case study processes, the amount and duration of resources committed to this process, a clear definition of the sequence of events in an action, and a track of the post-realignment situation to see if projections resembled actual results. The SAG endorsed this approach and selected the specific cases to be researched and tracked.^{1/} Command representatives who served on the SAG as observers subsequently acted as advisers and consultants to the study team members when actual data collection began.

2. Caveat. The reader should understand before going any further in this annex that the cases documented here accurately portray six of the seven realignment actions researched, but do not constitute the data base which ESC initially envisioned developing.^{2/} Figure F-1 portrays the case history phase of the ESC Study Plan; it provides a more detailed look at a phase which was presented initially in Figure 1 of the main paper (Volume I).

a. During the study planning phase, ESC committed itself to researching and developing seven case histories--the first of which would be a dry run to develop research techniques, data sources, data recording formats, and general problem identification. As shown on Figure F-1, this first research excursion addressed the Frankford Arsenal closure. The whole three-person team worked on this case because DARCOM HQ was within commuting distance of ESC and the team was consequently able to spend a week and a half refining its approach. A DM representative (MAJ Jim Harvey) accompanied the

^{1/} DA, OCSA, DM, SAG Meeting Minutes, Army Base Realignment Methodologies (memo). (For complete bibliographic information on this source and those following, see Volume I, Annex E.)

^{2/} DA, USACE, OCE, USAESC, Study Plan for Army Base Realignment Methodologies. (Abbreviated to ESC Study Plan in subsequent references.)

CASE RESEARCH APPROACH

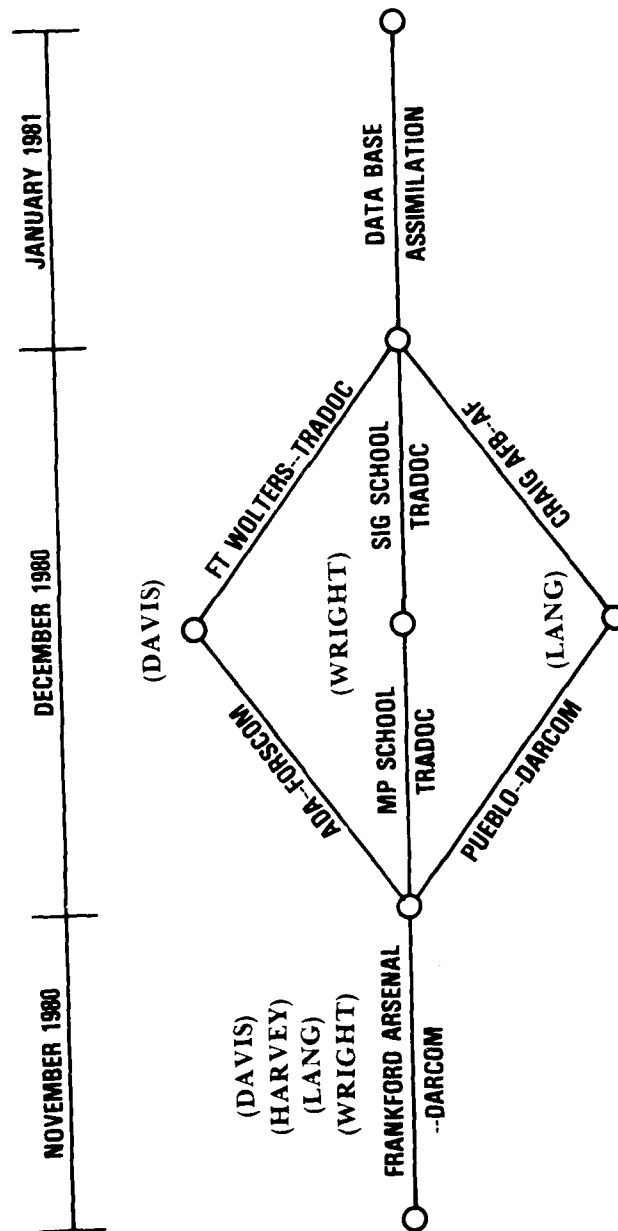


Figure F-1

team during much of its stay at DARCOM HQ and provided some procedural and historical insights from the DA Staff perspective to complement the MACOM viewpoint. The Frankford Arsenal closure proved too complex in its overlapping plans, directives, stops and starts to yield any substantial baseline against which to track the actual implementation or cull out resource commitments. It did provide, however, a real testing ground and eye opener to the difficulty of the undertaking. The ESC team decided at this point not to belabor this action by producing a written report and rescoped expectations concerning the remaining six cases.

b. The project team (Davis, Lang, Wright) then separated and went individually to research the six remaining cases--two each. Again, Figure F-1 portrays this breakout of case history research. Each DA case was researched by a 1-week, on-site visit to the appropriate MACOM HQ. These visits took place in early December 1980 and provided the first- and second-hand data required to document a case history. By the time team members were back at ESC working to compile and assimilate the data base, expectations for this phase had been adjusted to accommodate the likelihood that the resource and process data would be so spotty and case-unique that it might preclude full documentation. Five of the six cases proved clean enough to allow ballpark-level tracking, development of general resource commitment data, insights into the study and implementation processes that prevailed at the time of the action, appreciation of the command uniqueness of approach, and--most importantly--a more realistic sense of the reasonable utility for such data. The sixth case, the Signal School relocation, was comparable to the Frankford Arsenal action in that it was a victim of phasing complications and legal tie-ups. The costs and savings rationale in the Frankford CSJF was suspect as to

recurring savings and cost avoidance, and data availability/nonavailability clouded some of the key issues. The Signal School is presented because it raises so many relevant issues, rather than because it proves or disproves significant savings.

3. Research Process. The actions studied during this phase (three TRADOC, one FORSCOM, one DARCOM, and one Air Force) were selected from a relatively small list of "recently" completed realignments. Since most of these actions were over 5 years old, there was only limited data availability. Using contacts established at the initial SAG meeting, the team prearranged isolation of files, schedules of research trips, and availability of some key personnel for interviews. The team used the process decided upon during the Frankford Arsenal research. The checklist of data to be developed was drawn from the project's study plan: a descriptive history of the action; all major milestones, when they occurred, resources expended, and problems encountered; the costs and savings elements and other factors relevant to the case; comparison of actual to projected costs and savings; significant community impacts and other noncost factors; relationship between CSJF time phasing and implementation plan and actual implementation; and any problems arising during analysis or execution of the plan.

a. Documentation. The study team began each case by reading the CSJF, implementation plan, and progress and after action reports (if any). These documents gave a firm foundation for subsequent correspondence file reading, finance report study, and personnel interviews. Along these same lines, all relevant environmental assessments, EISs, and community impact reports were included as "must" reading. The availability of project files was influenced by the age of the action and the continuity of personnel

staffing within the various responsible offices. The changes in format over time also complicated understanding of the case study folders, but increasing sophistication and management knowledge caused previous shortcomings and ambiguities to be removed from the process.

b. Interviews. ESC team members opened each research effort by interviewing the local organizational chief to outline needs, procedures, and contacts and to receive some key MACOM-relevant overview information. All MACOM personnel were pleasant, cooperative, informative, and proud of their work in the area of base realignments. The MACOM observers on the SAG provided overview procedural information and helped direct ESC team members to the most relevant sources and most informed personnel. They were cooperative in providing copies of reports or loaning copies for the duration of the project. Subsequent to the initial research excursions, they continued to be available for telephone inquiries and provided information expeditiously through the mail. They reviewed the draft case reports which appear as Appendixes F-1 through F-6 and provided corrections and comments. In sum, their attitudes and actions exemplified a thoroughly professional outlook, pride in their work, and a willingness to contribute to improving the overall process.

c. Assimilation. Once the on-site research was completed, the team members returned to ESC to analyze and assimilate the data and insights gathered. During this process, the team had to come to grips with the realization that there were different types and amounts of data available for each case, and that this was not necessarily a serious problem. Each case was, therefore, written independently with only the roughest outline of common points to be addressed:

- (1) Description of action.
- (2) Duration of planning, staffing, and implementation events.
- (3) Sequence of events.
- (4) Salient features of action.
- (5) Critical factors in the decision and implementation processes.
- (6) Calculation of projections and actual data.
- (7) Implementation process and problems.
- (8) Tracking of actual costs and savings in light of projected (CSJF) figures.
- (9) Lessons learned.

4. Research Results. The step-by-step review of events, decisions, and documentation produced an in-depth appreciation for the issues and interactions that drive a realignment. Even though the processes revealed by the case histories have been updated and improved, they still helped to define the state of the art and to focus management attention on those aspects of the realignment process that are currently relevant. The deficiencies revealed in these past cases were then compared with the current realignment process and its upcoming revisions. Those shortfalls which have not or are not being filled then provided the basis for analytic problem solving (see Annexes B and C, Volume I, for specifics on these issues). Much of what was learned during this project was revealed through the mechanism of case history research and discussions with HQDA staff and MACOM personnel. To cite all the lessons learned and insights gained in one all-inclusive shopping list would probably dilute some of the major points. Therefore, the major lessons learned are listed below as they relate to the three products ESC originally

envisioned.^{3/} This arrangement provides a useful framework for presenting major findings.

5. Lessons Learned--Activities and Milestones. ESC had planned to use the case history research phase as an opportunity to gather information regarding the amount of time, number of people, and financial resources committed to a "typical" realignment action. This information would have no direct utility to those MACOM personnel developing the CSJF and implementation plan data, but would be useful to the DM in deciding when to proceed from a feasibility study to a full-blown CSJF or when to embark on a series of realignment studies. The case histories research, however, revealed that this was an idealistic plan and that several factors mitigate against developing such a "typical" milestone-resource network. Some of these major factors are:

a. Command uniqueness. Each MACOM and service (DA and Air Force) develops its realignment studies in such a way that there is very little uniformity among them on which to base such a typical model. (See Annex A, Volume I, for a detailed discussion of the various CSJF processes).

b. Case uniqueness. Each realignment action is also unique, leaving the range of iterations, resources, and durations too wide to provide useful management planning or control information. It seems that there are many more forces at work for variation than there are areas of commonality (e.g., the number of personnel to be realigned (229 to 3,998), the amount of annual recurring costs and savings (\$342,600 to \$26,000,000), the elapsed time from announcement of intention to study to completion of the closure (3 months to 4 years), the number of delays due to legal complications and political ramifications, the number of personnel assigned to develop the CSJF, the requirement

^{3/} ESC Study Plan.

to schedule or not to schedule MCA). Finding these tremendous variables caused the ESC study team to surrender any attempt to establish time, cost, or other resource factors for realignment action planners, other than gross estimates.

c. Data availability. Selection of research subjects was based on the criteria that they be recent, represent each of the MACOMs, and be completed so that the tracking of costs and savings projections could be attempted. Once these criteria were established, there were very few actions which met them. One criterion particularly affected the collection of resource/milestone information (i.e., be completed). So few proposed actions have been approved and actually implemented that the pool of candidates was very small. To get examples from each MACOM, it was necessary to select cases which had been implemented primarily in the 1974-1976 time frame. This, of course, affected the availability of data concerning the conduct of the study and implementation phases of the actions.

(1) During the time frame in question, resource data were not required and hence were not recorded.

(2) The individuals concerned with studying, planning, and implementing actions often were not available for interview regarding how many people took how long to do what.

(3) Even if there were some way of roughly estimating the resources committed to these realignments, the information would still be of questionable utility because it would reflect a process that is outdated and policies and procedures which have evolved since the completion of the actions. Rough estimates of current practice are summarized in Figure A-1 of Annex A (Volume I).

6. Lessons Learned--Methodology Improvements. The ESC Study Plan approved by the project SAG included a commitment to study the methodology and recommend improvements. These recommendations were anticipated to be unlimited in their range and implications. They were projected to include such changes as planning factor accuracy or inclusiveness, methods of calculating costs and savings, formats for presenting the economic and noncost factors, or sequence and duration of staffing processes. These recommendations would then influence the content of the revised AR 5-10^{4/} and the shape and substance of the tracking system which ESC was initially charged with developing. As the case history research unfolded, however, ESC became increasingly impressed with the comprehensiveness of the CSJF form and process. Most of the needed changes revealed in earlier cases had already been incorporated into either the current AR or a revision. Thus, there was little if any need to change the CSJF process any more than would result from issuance of a revised AR. ESC is substantiating these assertions with a detailed discussion of study methodology in Annex B (Volume I) and a brief summary of these points below--as revealed through the case histories.

a. CSJF evolution. The planning, staffing, implementation, and tracking of realignment actions have evolved significantly over the preceding decade and these evolutionary changes have primarily been improvements. The key areas of improvement have been in establishment of a standardized format and standardized procedures for developing realignment action projections, compilation of comprehensive checklists of factors to be considered and how to consider them, establishment of an on-going chain of responsibilities in

^{4/} DA, HQ, AR 5-10, Management--Reduction and Realignment Actions. (Abbreviated to AR 5-10 in subsequent references.)

clearly defined roles, incorporation of more sophisticated data accumulation and interfacing mechanisms, and broadening of the scope of the CSJF format to incorporate significant noncost factors without overburdening DA personnel in the development of those data. By standardizing CSJF requirements, DA has garnered the benefits to be achieved through development of in-house subject matter experts, progressively refined planning factor accuracy, and accumulating a backlog of both implemented and approved but pending CSJF cases.

b. Noncost factors. In conducting interviews of MACOM personnel and reviewing previous case histories, it appeared that DA has already effectively systematized the requirements included within the environmental, socio-economic, and EEO realms. HQDA and MACOM personnel are indeed sensitive to these requirements and are adept at developing the required documentation. It also appeared that it would be a duplication of effort to require that DA institutionalize any more comprehensive in-house capacity in these areas than already exists. CSJF handling of certain noncost factors (environmental, economic, and EEO issues) is already established through DOD and OMB directives, legal statutes, and Army regulations. Thus, ESC had no authority, charter, or expertise in these areas that would justify its intervening in the preparation or staffing of such information. The options with regard to addressing these topics were very few and related merely to their explanations within AR 5-10. As the AR revision now stands, it calls for the AR to reference such documents, policies, and regulations without including the substance within the AR text. This seems a rational improvement and well in line with the goal of reducing the bulk of the AR while maintaining CSJF comprehensiveness. Noncost operational effectiveness was previously covered through textual descriptions and will appear again in discussions of alternatives and graphic arrays.

c. Critical elements. On a more narrow focus, ESC analyzed the CSJF economic data from case histories and compared it with the requirements of the current and revised AKs. It became rapidly apparent that only a few "factors" could be considered critical and that all of these were addressed in implemented case documents and are now required to be included in the CSJF documentation. To be specific, personnel savings and one-time costs (including essential MCA) are the critical elements and must balance out to enable a 7-10-year payback period if an action is to be considered cost-effective. It is possible, too, for an action to result in increased costs and increased efficiency. Where this is the case, operational effectiveness must be proven (obviously a case-dependent situation). Thus, ESC analysts decided that consideration of critical elements was and had been adequately addressed. If anything, the major criticism that could be generated was that too much attention may have been expended in developing extremely voluminous and accurate projections where ballpark-level estimates would have proven the case conclusively and at much less cost. It is only the saleability of inexact projections that then becomes debatable. The cases ESC researched, therefore, were unanimously effective in isolating the critical elements and projecting their impact on budget levels and management decisions.

d. CSJF estimates. ESC's review of realignment estimates and their accuracy revealed that this evolving process had resulted in increasingly accurate projections. It appears that past CSJF estimates have been rather on the conservative side. These estimates have been reviewed by AAA personnel and sometimes GAO representatives and have held up well. ESC rapidly abandoned any idea it had held of suggesting ways of improving the accuracy of CSJF estimates. This area of estimate accuracy was further complicated by the

ESC conclusion that statements of actual recurring costs and savings could never be considered as more than revised estimates of recurring costs and savings. With this in mind, it would be fatuous to suggest ways of narrowing the gap, since we were simultaneously stating that this gap never represents anything more than an estimate.

e. Distinctive problems. In the course of retracing the case histories of implemented realignment actions, it became apparent that each case encountered distinctive problems such as changes in decisions along the way, or legal actions, or construction, or budgetary delays which complicated the action's progress toward implementation. These problems, for the most part, could not have been avoided by any methodological changes. Where there were problems which could have been avoided, this learning was incorporated into AR improvements.

7. Lessons Learned--Tracking System. The ESC study team was assembled primarily to address the task of improving the existing DA system for tracking realignment actions once they have proceeded into the implementation phase. The goal for this tracking system was to develop a process which would economically capture actual data and record that data for comparison with projections. Thus, the DM would have documentation to substantiate the credibility of DA's process or, if necessary, back up any pressure they might exert to require MACOM improvements. ESC was committed early on to recommending a tracking system which met management's needs without imposing undue input requirements. Using previous cases to gain experience as to the accuracy of estimates and tracking method options, ESC analysts tried to track the costs and savings associated with each of its implemented actions. The results were very revealing. Rather than indicating obvious areas for improvement,

the case histories revealed that the current quarterly tracking/ monitoring system is extremely accurate despite the variables and built-in inaccuracies of establishing recurring costs and savings values. They also revealed that the system is too ambitious in striving for quarterly accuracy. The following specific points concern the research findings that pertain to tracking system design and utility.

a. The older cases implemented before the current CSJF format was in effect were very difficult to track. It was difficult to understand projected savings calculations, let alone actual costs and savings--given the long elapsed time, the records retirement practices, and the failure to collect such data at the time. The newer cases were more easily understood because of standardization of format, calculation methodology, more readily available records, and some first-hand knowledge from personnel still available for interview.

b. One-time costs and manpower shifts (especially for civilian personnel) can be tracked. Even the older cases could be tracked from the perspective of manpower shifts. One-time costs in the older cases were suspect, but this appeared due to unavailability of data, rather than to some inherent difficulty in obtaining such information. In fact, it was this problem with one-time costs in earlier cases that initially pointed out the necessity to accumulate these data during the action rather than after it is completed. This is particularly true for realignment actions which take a long time to implement. Briefer actions could probably be tracked after the fact without losing much confidence in the data. DA has, however, taken measures to require in-process collection of realignment cost data. Therefore, this perceived shortcoming has already been remedied and only the format

for presentation, level of detail, and frequency of reports are subject to revision by the ESC study team.

c. Recurring costs and savings are so difficult to measure that it is almost an exercise in futility. The environment is so dynamic and there are so many decision changes along the way that it is almost impossible to identify a situation which can be isolated, quantified, and confidently termed "actual" costs and savings. Thus, it is imperative that anyone using "actual" implementation costs and savings data understand that these figures can never represent more than a revised "estimate." The tracking exercise, then, involves comparing an initial projection figure used for decision purposes with an after action figure gathered from an environment which exists briefly and is considered to be the result of the realignment action.

d. There is a tendency for actual costs to equal projected costs in the realm of one-time expenditures. This is not a result of deliberate data manipulation as much as it is a result of the self-fulfilling prophecy. When an implementation decision is made, budgets and program year budget levels are adjusted to reflect the projected realignment costs and savings. Thus, there is a real-world pressure to meet these levels. Coming in under budget in one area is usually offset by overruns in other areas. This may or may not be a coincidence. Certainly, it is often the case that there is little variation from projected costs and savings in the more recent cases.

e. MCA is somewhat of a hybrid category. If the construction involved is truly essential to the action, it should be considered a one-time cost. If, however, it is not essential and if the action can proceed without project completion, MCA is certainly closer to a recurring cost in that the action might be completed prior to completion of MCA, implying that the

one-time costs had already been incurred and should be tallied and set aside. Since case histories show that very little of this nonessential MCA is ever constructed as projected in the CSJF, it is unrealistic to consider this a very significant component of the economic justification.

f. The Department of the Air Force uses a tracking process similar to that currently being used by DA. Air Force experience with this mechanism closely resembles that of DA. In fact, the Air Force is considering discontinuing the requirement to collect such data on a quarterly basis because of the effort involved. They have essentially reassured themselves that their CSJF process is accurate enough, and they do not wish to impose any unnecessary and expensive data recording requirements on either their installation or MAJCOM personnel.

LAST PAGE OF ANNEX F

APPENDIX F-1

CASE REPORT--ADA REALIGNMENT ACTION

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1. General Description. The following paragraphs present the background of the FORSCOM ADA realignment.

a. Reason. As a result of the 1973 CONCISE actions, most US Army Air Defense Command units were inactivated. But, because the 31st ADA Brigade and the 1/43 Nike-Hercules Battalion had been transferred from Program 1 STRAF funding to Program 2 mission money, these units were missed in the inactivation planning. General Kerwin, first Commander of FORSCOM, recommended that the inactivation of remaining ADA assets be studied and presented to DA. General Cooper, Commanding General of the 31st from 1972-1976, wrote several letters during that period saying that his unit had no mission and that they were performing make-work functions.

b. History. The proposal to realign ADA assets was briefed to DA, and the actual study of inactivating remaining ADA assets began in 1976. It

was updated during 1977 and 1978. Mr. Daniel Powell, DCSOPS, Force Structure and Stationing Branch, was the FORSCOM action officer who researched the case, prepared the CSJF,^{1/} revised the case through various alternatives, developed the Homestead LOI,^{2/} and monitored the implementation action that resulted. The proposal was finally approved and made public in March 1979. Inactivation took place in July and August 1979 and proceeded according to two LOIs--one each for the Homestead, Florida, and Fort Richardson, Alaska, units. Two sets of small Nike-Hercules and Hawk installations (near Homestead AFB, Florida, and near Fort Richardson, Alaska) were placed in caretaker status at that time. (See Figure F-1-1 for a more detailed listing of events.) Although the ADA Realignment CSJF and resulting announced decision called for excessing the 15 missile sites associated with these ADA units, most of these sites are still (May 1981) in caretaker status and being guarded from vandalism and looting by contract personnel. This on-going expense amounts to about \$600,000 annually and will continue until the property is excessed to GSA (now scheduled for December 1981).

2. Action Taken. This FORSCOM ADA realignment action resulted in closing 15 missile sites--12 in Florida and 3 in Alaska.

a. Personnel transfers. The military personnel who operated those sites were reassigned to units where they could be more effective, or their units were transferred to other bases.

(1) The 1st Battalion 43d ADA in Alaska was inactivated; its personnel were returned to MILPERCEN for processing within the pipeline.

^{1/} DA, FORSCOM, HQ, Abbreviated Case Study and Justification Folder and Environmental Impact for Realignment FORSCOM ADA Assets. (Abbreviated to ADA Realignment CSJF in subsequent references.)

^{2/} DA, FORSCOM, HQ, Letter of Instruction (LOI) for Realignment FORSCOM ADA Assets. (Abbreviated to Homestead LOI in subsequent references.)

ADA REALIGNMENT ACTION MILESTONES

Event	Date
Recommend Study to DA	1976
Collect Study Data	Apr 76
Prepare Initial Document/Scoping	--
Environmental Assessment (Draft Sep 76)	Dec 76
MACOM Staffing	--
AAA Begins Audit	On-going
Document Review (Begin due to new alternative 31 Aug 77); Contract Input to EA for NAS Realignment, Boca Chica	77-78
HQDA Staffing	--
Final Document Preparation (1-man project)	Apr 78-early 79
"Ft Bragg Hawk Stationing Plan" ^{a/}	29 Mar 78
"Hawk Training Support Plan" ^{a/}	7 Jun 78
Prepare and File DEIS (Draft EA Consolidated)	1 Feb 78
Congressional Review (the day of announcement)	29 Mar 79
Public Hearings	None
File FEIS	None Required
HQDA/DOD Staffing	Sep 78-Mar 79
Detailed Logistics and Personnel Planning	Nov 78-Mar 79
Announce Decision	29 Mar 79
LOI (Prepared Jan-Apr 79)	
Homestead Initial Publication 13 Apr, Updated	15 Jun 79
Alaska Initial Publication 11 Apr, Updated	30 Apr 79
Homestead Closure Implementation (per LOI)	2 Jun 79
2/52 Arrive Bliss	1 Jul 79
3/68 Arrive Bragg	1-15 Aug 79
1st Battalion, 43d ADA--Alaska Nike Sites Inactivated and Troops Reassigned per LOI (LOI classified due to nuclear component used at installation and unit levels only)	31 Jul 79
Caretaker Status, Florida and Alaska	Aug 79-to date
Excessing of Property	
GSA Accepted Sites	Sep 80-Nov 80
FORSCOM Provide Security Thru	Dec 81

^{a/} Effective for planning pending SECDEF decision to restation ADA units.

Figure F-1-1

(2) MILPERCEN reassigned personnel of the 1/43d ADA predominantly to units in Korea and Europe.

(3) Units of the 31st ADA Brigade were relocated to Forts Bragg and Bliss.

(4) In all, some 269 civilian and 2,788 military positions were involved. The job migration diagram at Figure F-1-2 depicts the action both conceptually and in detail. The Florida ADA unit was dispersed, with 750 military and 43 civilians transferring to Fort Bragg, North Carolina, and 1,359 military and 49 civilians transferring to Fort Bliss, Texas. An excess of 201 military was reassigned elsewhere, and 131 civilian positions were eliminated.

b. Purpose of transfers. The realignment of these ADA units was designed to take personnel who had an outdated mission and reassign them to more important functions within installations and organizations whose support base is large enough to benefit from economies of scale. The major sources of savings were elimination of 172 civilian positions and reduced BASOPS expenses due to closure of 15 missile sites and headquarters posts located on Homestead AFB and Fort Richardson.

c. Results of realignment action. All sites have been closed and units relocated as planned.

(1) The missile sites are either in caretaker status, absorbed by larger military installations, or have been taken over by other military units. Site 12209 in Key West is being used by waterborne frog teams for training, and site Summit in Alaska has been incorporated into Fort Richardson.

(2) ADA equipment at Fort Gillem has been excessed, and the ADA training function at Fort Bliss has been eliminated.

JOB MIGRATION DIAGRAM--FORSCOM ADA REALIGNMENT
(Per ADA Realignment CSJF, April 1979)

Transfer: 750 mil, 43 civ to Bragg

Florida	Mil	Civ
31st Bde Hq	282	213
Army Defense Support Fac	0	0
Army Air Defense Cmd Post	3	0
2/52d Bn (Hercules)	602	0
1/65th Bn (I-Hawk)	727	10
3/68th Bn (I-Hawk)	696	0
Before	2,310	223
Transfer Out	2,109	92
Eliminate	201	131
After	0	0

Eliminate:
201 mil
131 civ

Transfer:
1,359 mil,
49 civ
to Bliss

Alaska	Mil	Civ
1/43d Bn (Hercules)	546	0
524th Ord Co	114	0
Support	19	41
Before	679	41
Transfer Out	0	0
Eliminate	679	41
After	0	0

Eliminate:
679 mil
41 civ

Ft Bliss, TX	Mil	Civ
2/52d Bn (Herc)		
Before	392	5
Transfer In	603	0
Eliminate	72	5
Transfer Out	0	0
After	923	0
4/62d Bn (Herc)		
Before	283	0
Transfer In	0	0
Eliminate	283	0
Transfer Out	0	0
After	0	0
1/65th Bn (I-Hawk)		
Before	0	0
Transfer In	707	0
Eliminate	0	0
Transfer out	0	0
After	707	0
Support		
Before	0	0
Transfer In	49	49
After	49	49
Total		
Before	675	5
Transfer In	1,359	49
Eliminate	355	5
Transfer Out	0	0
After	1,679	49

Eliminate:
355 mil, 5 civ

Ft Bragg, NC	Mil	Civ
3/68th Bn (I-Hawk)		
Before	0	0
Transfer In	707	0
After	707	0
Support		
Before	0	0
Transfer In	43	43
After	43	43
Total		
Before	0	0
Transfer In	750	43
After	750	43

Figure F-1-2

d. Total savings realized. The After Action Report ADA Realignment form completed at the end of FY 79^{3/} cited savings of 172 civilian personnel vis-a-vis 177 projected in the ADA Realignment CSJR^{4/} and indicated that 1,235 military spaces had, in fact, been saved.

3. Economic Analysis. The ADA Realignment CSJF projected that resulting actions would cause \$25,340,000 savings in FY 80, \$6,185,000 in FY 81, and \$25,900,000 annually thereafter. Projected one-time implementation costs were \$24,800,000. These projections are shown in Figure F-1-3--an extract from the economic analysis on page 1-4 of the ADA Realignment CSJF. The basis for these savings is that 15 missile sites and the Army's elements at Homestead AFB and ADA equipment at Forts Gillem and Bliss would be closed out and result in significant BASOPS savings. These would accrue from transferring personnel to larger units (Forts Bragg and Bliss) to gain economies of scale in BASOPS and other support expenditures and from excessing outdated and unneeded equipment which would no longer require maintenance, retrofitting, and security. Although it would be virtually impossible to confirm on-going, long-term savings once the ADA elements have been transferred, it is not impossible to confirm the significant one-time savings to be achieved over the first 2 years of the action.

a. Accuracy of projections. Because this action occurred relatively recently, there is much documentary and first-hand information available. The action also reflects recent policy and regulation and mirrors current capabilities and technology. The RRSR^{5/} for this action is dated 28 August 1979, and

3/ DA, FORSCOM, HQ, After Action Report ADA Realignment (RCS Exempt).

4/ Five spaces at Fort Bliss were transferred from 31st Bde 2/52 Nike-Hercules to augment the post in support of foreign units Nike-Hercules.

5/ DA, FORSCOM, HQ, DCSOPS, Force Struc and Sta Br, FORSCOM ADA Realignment (RRSR). (Abbreviated to RRSR in subsequent references.)

ECONOMIC ANALYSIS--ADA REALIGNMENT
(\$000)

Appropriation	FY 79			FY 80			FY 81		
	Savings	One-time Cost	Net	Savings	One-time Cost	Net	Savings	One-time Cost	Net
OMA	1,980	-2,265	-285	6,470	-584	5,886	6,470	0	6,470
FHMA	392	0	392	1,620	0	1,620	1,620	0	1,620
MPA	4,524	-2,133	2,391	17,836	0	17,836	17,836	0	17,836
MCA	0	0	0	0	0	0	0	-19,741	-19,741
Total	6,896	-4,398	2,498	25,926	-584	25,342	25,926	-19,741	6,185

Figure F-1-3

REALIGNMENT RESOURCE SUMMARY REPORT--ADA REALIGNMENT
(28 August 1979)

	Phased Est	Actual	% Variance ^{a/}	CSJF Est	Current Est	% Variance ^{a/}
<u>Manpower Savings (Authorizations)</u>						
Officer	160	160	--	160	160	--
Enlisted	1,075	1,075	--	1,075	1,075	--
Civilian	177	172	-3	177	172	-3
Total Manpower Savings	1,412	1,407	<1	1,412	1,407	<1
<u>Recurring Costs/(Savings)</u>						
MPA	4,524	4,800	6	(17,836)	(17,786)	-<1
OMA/P2 BASOPS	611	--	-100	(3,096)	(3,096)	-<1
OMA/Mission	1,346	679	50	(3,374)	(816)	-59
Communications	--	--	--	--	--	--
Military Family Housing	392	--	-100	(1,620)	(1,366)	-16
Other OMA	23	6	-74	123	--	-100
Total Recurring Costs/(Savings)	6,896	5,485	-20	(25,926)	(23,064)	-11
<u>One-time Costs/(Cost Avoidance)</u>						
Military Personnel:						
Movement of Personnel/Dependents	547	554	1	--	75	
Movement of Household Goods	1,437	1,473	3	--	215	
Dislocation Allowances	149	158	6	--	23	
Civilian Personnel:						
Terminal Leave Payments	89	169	90	--	348	
Severance Pay	303	0	-100	--	--	
Relocation Costs	537	748	39	--	--	
Transportation of Supplies and Equipment	2,458	2,842	16	--	35	
Cost of Putting Installation in Caretaker	140	239	71	--	--	
Cost of Caretaker Pending GSA Takeover	15	250	1,566	--	1,680 ^{b/}	
Cost of Homeowners Assistance Program	--	--	--	--	--	
Construction	--	--	--	19,741	--	
Other (Identify)	(1,000) ^{c/}	124 ^{d/}	112	--	1,200 ^{d/}	
Total One-time Costs/(Cost Avoidance)	4,675	6,557	34	19,741	3,576	-82
Total DOD Costs/(Savings)	11,571	12,042	3	(6,185)	(19,488)	215

^{a/} % Variance = Phased Estimate minus actual cost or revised estimate divided by estimate.

^{b/} \$1,680,000 caretaker cost (\$1,072,000 Alaska--FY 80 estimate; \$608,000, Homestead--FY 80 estimate).

^{c/} \$1,000,000 Telar Microwave update cost avoidance.

^{d/} Area support Fort Stewart.

Figure F-1-4

it compares ADA Realignment CSJF projections against actual expenditures through the period of the initial transition (see Figure F-1-4). The expenditures remaining to be checked against projections are MCA costs, which comprise the whole of one-time costs for FY 81--these were not scheduled for completion until FY 81. The RRSR indicates that recurring costs and savings were overestimated slightly, while one-time costs and cost avoidances were underestimated by a slightly greater margin. The major factor causing this underestimation of one-time costs is the expense of contract services to caretake the vacated 15 missile sites in Florida and Alaska. This expense was projected to be of short duration prior to the cannibalization and excessing of the vacated sites, as called for in the ADA Realignment CSJF and decision documents. The \$235,500 underestimation of caretaker expenses for FY 79 accounted for much of the \$1,682,000 underestimation of one-time costs. The continuation of caretaker operations in Florida and Alaska is prolonging and exaggerating this inaccuracy in the CSJF projection. The rather hefty \$880,000 per year caretaker expense cuts deeply into the "real money" savings that have been garnered by the realignment. This is because the projected \$25,900,000 annual recurring savings are largely derived from the \$17,836,000 in MPA funds which are actually more operational or efficiency savings than actual money saved. The remaining \$8,000,000 in recurring savings certainly seem indicated or reasonable, but it is virtually impossible to track because of the ever-changing base composition at the gaining installations. Thus, this rather soft \$8,000,000 real money savings is significantly diminished when the \$880,000 annual caretaker fee continues.

b. Tracking of expenditures. Although there may be some argument as to whether MPA funds should be considered monetary savings, it is still

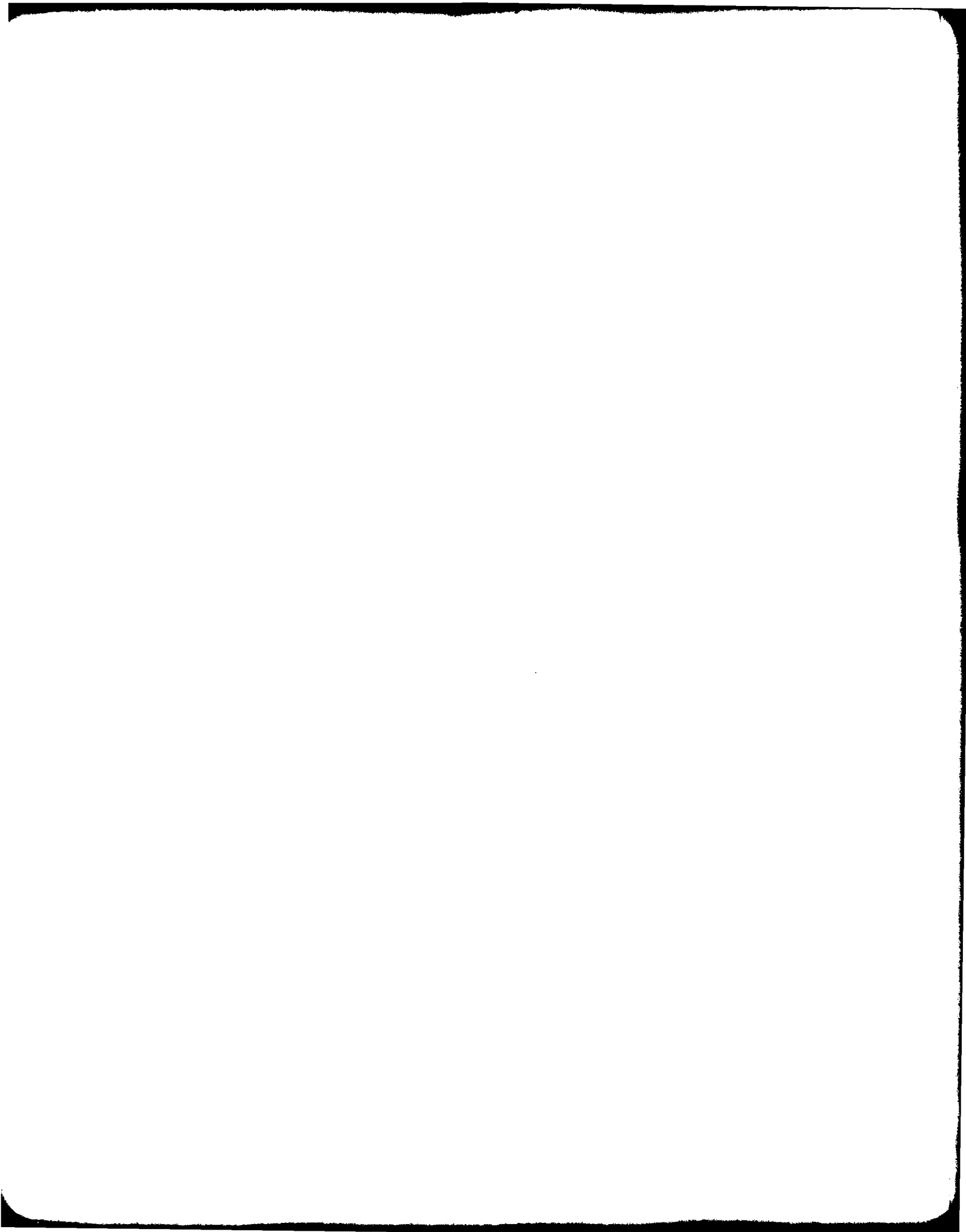
possible, through current programming, budgeting, finance and accounting procedures and reports, to doublecheck many of the expenses and savings incurred during this realignment.

(1) The Homestead LOI for realignment of FORSCOM ADA assets stated in paragraph 6c that "In order to facilitate the preparation of a DA-DOD directed after action report, staff offices will maintain appropriate realignment information." There are two versions of the RRSR--6 August 1979 and 28 August 1979. They were prepared by two separate individuals, obviously using the same data and reporting the same totals to that time. CPT Specht, then of DCSCOMPT, Programming and Budgeting Division, conducted an audit of funding and accounting once the action was implemented and provided after action rollup data from December 1979 which matched the August data. The 6 August version of the RRSR cites the ADA Realignment CSJF estimate of recurring savings and projects that actual savings will be \$23,064,000, rather than \$25,926,000. Both CSJF and actual projections have the same order of magnitude and indicate that savings might be expected to result from the action.

(2) The Homestead LOI also states that "Initially, current OMA funds will be used to finance the realignment. Additional funds will be provided, if required, after review of the budget estimate." CPT Specht prepared and submitted monthly information papers covering the period June 1979 through 22 October 1979.^{6/} These reports arrayed actual expenses which were later reflected in the AFCO-2 reports and ultimately the FAPAB reports.^{7/} Tracing

^{6/} DA, FORSCOM, HQ, DCSCOMPT, Information Papers (Reports covering period June-October 1979).

^{7/} DA, FORSCOM, HQ, DCSCOMPT, FORSCOM Command Operating Program, Vol II, Detailed Guidance (FAPAB) (Microfich copies of reports for Homestead AFB, Fort Bragg, and Fort Bliss). (Abbreviated to FAPAB report in subsequent references.)



the FAPAB report for the losing and gaining installations during the period preceding and through implementation corroborates the data in the information papers and the backup forms titled "Request for Funding Adjustment" which were found in FORSCOM project files and contain remarks explaining the requested adjustments.^{8/} These documents substantiate the summary data reported in the RRSR. All of the data reported in the above documentation are recorded in terms of the AMS^{9/} account codes and are closely related to the data entries required on the RRSR as comparison data with CSJF projections. Applicable accounts can be traced throughout the realignment action and can be used to confirm that funds + or - the budgeted level were expended or transferred at or to losing and gaining installations.

(3) The manpower rollup in the FAPAB report also can be used to substantiate actual versus projected volume of personnel transferred and eliminated. This tracking means is effective only over the short term, however, because there is so much variation in a large gaining installation's manpower base that the actual and programmed manning levels soon lose their ability to delineate the source of increased or decreased personnel levels. The FAPAB report indicates current year, budgeted year, and one programmed year of funding, manpower level, and cost/man-year within each AMS funding code. These records are reported for installations and enable a quick check on economies of scale within and among various accounts and installations.

4. Tracking of Events. The FAPAB, AFCCO-2, and AFCCO-17 reports combine with official messages and after action reports to enable tracking of events

^{8/} DA, FORSCOM, HQ, Alaska (AFCCO-17 Forms, Request for Funding Adjustment).

^{9/} DA, HQ, AR 37-100-79, Financial Administration, The Army Management Structure (AMS).

in the realignment action against planned schedules. The schedule printed in the Homestead LOI was also developed by Mr. Powell in conjunction with installation personnel; he then monitored implementation throughout--keeping in touch with losing and gaining installation personnel and with Programming and Budgeting personnel (CPT Specht) to forestall problems that might develop. Because this action involved primarily military personnel and did not meet the opposition of public hearings and court injunctions, there were no delays to prevent the meeting of scheduled transfers and events in accordance with the provisions of the LOI. Troops were relocated and equipment was shipped, processed through product improvement, and received; and sites were closed within days of their scheduled implementation dates. (Note that this comment applies only to the Homestead LOI, because the Alaska unit LOI was classified due to nuclear components and was not relayed to FORSCOM HQ; it was developed and used at the installation level.) There appears to have been some problem with the assignment of new military personnel to relocating units rather than to the receiving installations--this was to have begun in May 1979, but was delayed. This lesson learned has been addressed by FORSCOM and they have made recommendations for preventing its recurrence.

a. There is extensive correspondence on the subject of contract guard services to conduct caretaker tasks.^{10/11/12/13/14/} This correspondence

^{10/} DA, US Army Criminal Investigation Cmd, Dir, Ops Dir, Request for Criminal Threat Estimate.

^{11/} DA, FORSCOM, HQ, DCSOMPT, Budget Anal, Security Cost Funding for Vacated ADA Sites.

^{12/} DA, FORSCOM, HQ, DCSOPS, Force Struc and Sta Br, Request for Contracting Authority (MFR).

^{13/} DA, FORSCOM, HQ, DCSOPS, Force Struc and Sta Br, Review of Contract Guard Specifications (MFR).

^{14/} DA, FORSCOM, HQ, DCSOPS, Force Struc and Sta Br, Security Costs for Vacated ADA Sites in Alaska and Florida (DF).

documents the decision not to caretake as per the DA decision. This delay in implementing the planned action exemplifies the problem of tracking, once the major realignment is completed. The question is: Should FORSCOM personnel be required to continue submitting quarterly ADA realignment action reports to DA now that all troops and personnel have been relocated, funds transferred, and equipment serviced and installed? Although not now required to do so (final report having been submitted 13 December 1979), it would simplify the problem of knowing if and how the action is ultimately completed--to include addressing and understanding whether gaining installations ever actually assign received personnel/spaces to the transferred functions.

b. The after action report and RRSR indicate one-time costs and savings, actual and projected. They cannot, of course, go beyond indicating that certain MCA is recommended as being required to complete the action and thereby round out the cost and savings computations. Personnel interviewed at FORSCOM indicated that most of the MCA cited in the ADA Realignment CSJF and required for the action never in fact is placed. As of 20 September 1979, construction requirements identified in the CSJF were not in the FYDP Intermediate or Long Range Program. These requirements of \$19,500,000 could be counted toward savings if the construction is never programmed. This information and other status information is contained in an MFR of that date signed by Mr. Powell.^{15/} Apparently the DA budget submission for FY 80 did not reflect the savings from the FORSCOM ADA realignment. Mr. Powell's explanation is that the manpower space savings associated with the study were retained by DA and FORSCOM to upgrade Hawk units and other strategic forces.

^{15/} DA, FORSCOM, HQ, DCSOPS, Force Struc and Sta Br, ADA Realignment (MFR).

5. Lessons Learned.

a. Even with a clear audit trail, prompt and complete status reports, and the benefit of extensive documentary and interview evidence, it is highly unlikely that a situation would ever exist in which an action could be tracked through implementation and into steady state and confirm or refute those projections of recurring savings in certain areas. This case, as did all others researched, involved location of personnel at an installation already undergoing so much change that the baseline data have no permanence. The Fort Bragg FAPAB reflected receipt of funds in OMA (BASOPS and Mission), Supply, Training, and Personnel Support Service AMS accounts. These current year increases were not, however, reflected in the budgeted or program years. And, even more pointedly for tracking insights, they were not reflected in the manpower level data (either current or future). This same comment applies to the scant FAPAB data available on Fort Bliss (i.e., current year impact reflected in OMA Mission funding account), but not indicated in budget or program years. The implication here is that installation programmers are aware of impending changes which will alter their manpower level and funding allocations. Thus, when one action results in an increase and another causes a decrease, the baseline level often changes very little. This may negate the need for some MCA projected in the ADA Realignment CSJF or may cause the receiving installation to reallocate resources received in a way other than indicated in the CSJF. For example, projects in the FY 84 Construction Program for the 3/68th I-Hawk Battalion at Fort Bragg are identified as requirements for Patriot. The picture does not stay in focus long enough to allow a final after action comparison of projected costs and savings. This is not to say, however, that the realignment process is a "shot in the dark."

Rather, the evidence is that this action probably resulted in greater savings than projected (even accounting for prolonged caretaker expenses), but that they cannot be quantified precisely enough to justify further attempts to do so.

b. The CSJF category titled "Cost of Putting Installation in Caretaker" is a cost category that appears reasonable enough when calculated initially, but which is extremely difficult to track. Unless these costs are so great as to drive the decision, they probably should not be tracked or reported on the RRSR. They appear to be an area of costing which has enough flexibility to accommodate any inaccuracies in the other projections (i.e., slush fund for the action to make it cost whatever was funded or to enable explanation when there are overruns).

c. When the realignment or closure is scheduled to take place over a brief period of time and involves primarily military personnel, it is very likely that it will proceed with few hitches. This action was approved in March 1979 and completed in August 1979. It occurred on schedule and within reasonable variance of the projected cost. This case serves as a striking contrast to actions, such as the DARCOM closure of Frankford Arsenal, which encounters delays and civilian personnel problems that cause cost variations in one-time categories.

d. The job migration diagram required in AR 5-10 but not available in the ESC copy of the CSJF for this ADA realignment action is a key element for the reviewer. If this is not available, it takes many iterations through the document to become familiar with the proposed action and to understand the events that eventually unfold.

e. MPA probably should not be rolled up into recurring costs and savings unless DA reduces its force level. This distorts the picture of recurring costs and savings. MPA probably should be handled separately in the realignment summary.

f. AMS coding should be included in the CSJF format for those data categories which are decision-driving factors. This will ensure that the actual cost and savings can be tracked. Any data required on the tracking report which cannot be reflected through some formula of computation based on AMS account codes should be deleted from the tracking data requirements.

g. The FORSCOM programming, budgeting, and cost accounting practices are very nearly aligned to CSJF categories and enable maintaining an audit trail. FORSCOM personnel coordinate and plan such realignments in a thoroughly professional and rigorous fashion. The documentation is readily available, and personnel are willing to share their insights and experiences. Some of their more significant suggestions are listed below.

(1) Gaining installations will show increased expenses in only some BASOPS categories--not in grounds maintenance, roads, and heating of buildings where additional buildings are not required. Thus, BASOPS increases would be uneven and would depend largely on the type activity being transferred. This makes it very complex to project costs and savings at receiving installations.

(2) The number of data sheets required in the CSJF is excessive. Not all detail sheets are required by decision-makers. The summary sheets are more relevant to the decision than are the backup material. Reworking the same data in many formats is more trouble than it is worth, especially prior

to a decision. Changes in format due to AR 5-10 revision will reduce this problem somewhat.

(3) Cost avoidance is a very iffy business and requires considerable judgment by the individual(s) preparing the CSJF. Tracking, or even calculating dollars "not spent" is an exercise in judgment, restraint, and precognition. For example, savings due to cost avoidance from MCA projects which have been on the FYDP for more than several consecutive years tend to distort the picture of savings to be achieved. FORSCOM personnel indicate that they carefully screen such items before including them in their projections. If these are the items that drive a decision for realignment, then they should be addressed in more detail.

(4) Development of the preferred alternative is the most difficult, time-consuming, and controversial phase of the realignment process. Actions involving small installations often have myriad possible alternatives--any one of which might be preferred for various reasons. FORSCOM CSJF preparers complained that their work must often be redone, once all the calculations and backup work are incorporated into the CSJF and it has gone all the way to Congress. At that time, someone will raise the question: What if you moved unit "X" to installation "Y" instead of installation "Z"? Apparently this is not so much a problem of reconsidering information for purposes of selecting a different preferred alternative as it is a matter of reassurance that all bases have been covered. The preferred alternative then must be developed in the level of close detail required to array physical installation data and construction requirements, manpower and personnel analysis, economic analysis, item cost explanation sheets, reorganization/realignment manpower worksheets, etc. One FORSCOM suggestion was that the alternatives be arrayed

in summary, the preferred analysis selected, and summary data sheets developed to an order of magnitude appropriate to achieving a decision. Only then, once the decision is rendered, would the analyst go through and develop the detailed data and work with installation personnel to develop the LOI. Thus, many full iterations would not be required, and the CSJF would be more up to date when ready for implementation. Also, the LOI could be based on more recent data.

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APPENDIX F-2

CASE REPORT--CRAIG AIR FORCE BASE CLOSURE

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1. Background.

a. Reason. In March 1976, the US Air Force announced that it was examining its undergraduate pilot training base structure in an attempt to be more efficient in its training operations. Craig and Webb AFBs were identified as candidates for closure. By October 1976, Craig had been selected for closure because it had the lowest annual production capacity of the seven undergraduate pilot training bases, had more restrictive flying weather, had only two runways, had World War II temporary mobilization-type structures, and had limited room for expansion of both training and support facilities. The closure of Craig would result in the excessing of all existing facilities and structures.^{1/}

^{1/} DAF, DCS for Prog and Anal, Base and Sp Actv Div, Basing Br, Case Study and Justification Folder, Craig AFB, Alabama. (Abbreviated to Craig AFB CSJF in subsequent references.)

b. Description. Craig AFB would be completely closed, resulting in a projected savings of 454 civilian, 856 enlisted, and 163 officer positions. There would be transfers to other bases of 53 civilian, 222 enlisted, and 129 officer positions. One-time costs were expected to be \$8.8 million. There would be a one-time cost avoidance in construction of \$11.1 million--\$10.8 million in appropriated funds and \$0.3 million in non-appropriated funds. Expected annual cost avoidances (savings) at steady state were \$26.0 million. The closure of Craig AFB was expected to have no strategic or significant adverse operational impact on the Air Force missions. There would be a marginal improvement in the bio-physical environment of Craig (Selma, Alabama). The increase in population at the remaining pilot training bases would not cause a significant environmental impact. However, there would be both population and economic losses in the Selma, Alabama, area resulting from the closure of Craig AFB.^{2/3/}

c. Milestones. Figure F-2-1 shows the major milestones for the Craig closure. The Air Force procedure for performing closure actions did not differ greatly from steps followed in the Army cases. HQAF personnel performed feasibility studies, narrowed the field to a few candidates, and recommended specific undergraduate pilot training bases for closure. After approval at DCS level, the public announcement of formal study was made and the MAJCOM became involved in the detailed CSJF preparation process including community impact and environmental aspects.

^{2/} DOD, OASD (MRA&L), Ofc of Economic Adjustment, Economic Adjustment Program, Selma/Dallas County Alabama, Volume 2, Preliminary Base Reuse Plan, Craig AFB.

^{3/} DOD, OASD (MRA&L), Ofc of Economic Adjustment, Economic Adjustment Program, Selma/Dallas County Alabama, Federal Team Visit Report.

MILESTONE CHART--CRAIG AFB CLOSURE

Major Event	Date Completed
Feasibility Study	Sometime in 1975
Preliminary CSJF prepared	January 1976
Announcement of study to close Craig	March 1976
DEIS	September 1976
FEIS	February 1977
Decision to close Craig	March 1977
Justification Report to Congress	April 1977
EAC initiates assistance program	April 1977
First transfer of personnel	June 1977
Second transfer/elimination of personnel	September 1977
EAC completes preliminary report	October 1977
EAC completes report	January 1978
All personnel positions eliminated at Craig	September 1978
Action completed	September 1978
Tracking report completed	March 1979

Figure F-2-1

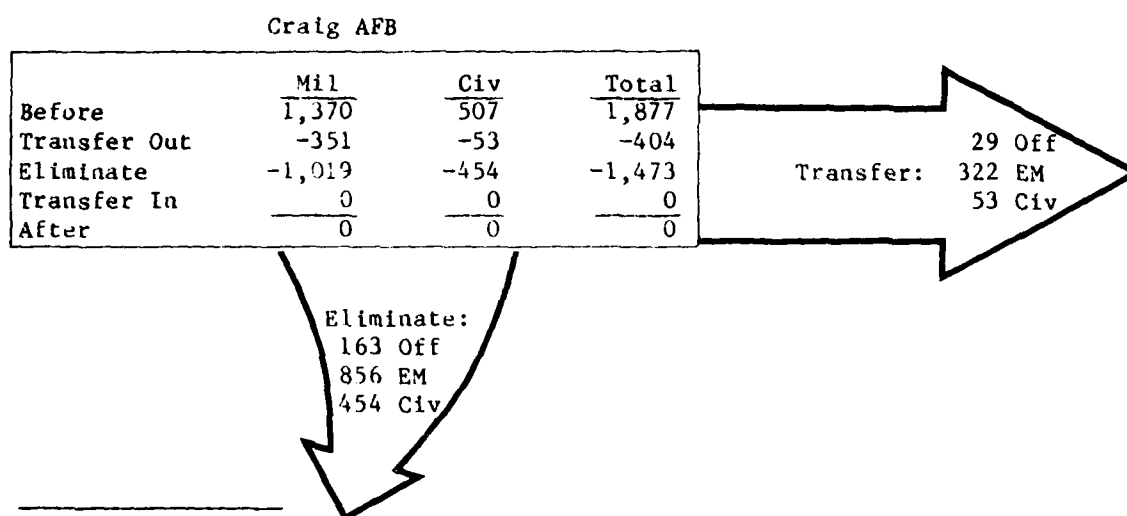
2. Implementation. Craig AFB was closed according to the schedule of major milestones shown in Figure F-2-1. The justification report to Congress (613 and 612 report)^{4/} showed summaries of costs and expected savings but contained no detailed implementation schedule. The Training Command (a MAJCOM similar in concept to TRADOC) prepared the implementation plan which was approved by HQAF. The Training Command monitored the closure and prepared quarterly reports on the progress of the action with respect to the cost estimates in the Craig AFB CSJF. Craig was closed; and, with assistance from the EAC, it was turned over to the CFAIA of Selma for commercial development.^{5/} Except for delays in military family housing unit turnover, the closure action went smoothly.

^{4/} DAF, HQ, Report on the Estimated Fiscal, Local Economic, Budgetary, Environmental, Strategic, and Operational Consequences of the Closure of Craig Air Force Base, Alabama. (Referred to as 613 or 612 reports in subsequent references.)

^{5/} DOD, OASD (MRA&L), Ofc of Economic Adjustment, Preliminary Airport Layout Plan, Craig AFB, Selma/Dallas County Alabama.

3. Manpower Shifts. Figure F-2-2 is the job migration diagram for Craig AFB. This was a simple closure action which caused minimum turbulence at other Air Force bases. Personnel at Craig were either eliminated from the Air Force or transferred to other bases. A small caretaker force was created to turn over the government property at Craig to the CFAIA.

JOB MIGRATION DIAGRAM--CRAIG AFB CLOSURE^{a/}



^{a/} Craig AFB CSJF.

Figure F-2-2

4. Economic Analysis and Tracking. The Air Force uses three categories of costs and savings in realignment actions: one-time costs, recurring costs, and cost avoidances. The Army incorporates cost avoidances into the one-time and recurring costs categories and uses net figures. Other than this format difference, the Army and Air Force use very similar categories and procedures for estimating costs and savings of realignment actions.

a. One-time costs. Figure F-2-3 shows the projected and actual costs involved in closing Craig AFB. The actual costs came from quarterly

tracking reports produced by the Air Force Training Command and forwarded to HQAF. Note that no construction projects were anticipated at either the gaining or losing installations for this closure action. All costs were adjusted to the base of FY 77.

ONE-TIME COSTS FOR CRAIG AFB CLOSURE
(FY 77 Dollars in Millions)

Category	CSJF (612) Estimate	Actual
Military PCS	2.5	2.2
Civilian		
PCS	0.9	1.0
Severance and Leave	0.3	0.5
Placement	<u>0a/</u>	0
Homeowners Assistance	2.2	1.2
Construction	0	0
Material Transportation	0.4	0.1
Communications	0.3	0.2
Other	<u>0.2</u>	<u>0.1</u>
Total	6.8	5.3

NOTE: Items missing from current Army categories are OMA or similar type facilities. The Air Force treats cost avoidance whether one time or recurring, under one category.

a/ Activity represents less than \$0.1 million.

Figure F-2-3

b. Recurring costs. A review of several base realignment actions revealed that the Air Force uses recurring cost categories almost identical to those of the Army. Figure F-2-4 shows the categories, estimated costs, and actual costs obtained from the quarterly tracking report. As in Figure F-2-3, costs in the actual column have been adjusted to FY 77 dollars. Actual costs are smaller than estimated because the caretaker status was terminated early.

RECURRING COSTS FOR CRAIG AFB CLOSURE
(FY 77 Dollars in Millions)

Category	CSJF Estimate	Actual
Caretaker		
Mil Personnel	2.0	1.0
Civilian Personnel	2.4	1.2
Other O&M	0.4	0.5
Communications ^{a/}	0	0 ^{b/}
Military Family Housing	0	0.4
CHAMPUS	0	0
Total	4.8	3.1

^{a/} Included in other O&M.

^{b/} Activity represents less than \$0.1 million.

Figure F-2-4

c. Cost avoidance. The Air Force keeps track of cost avoidances separately because they are estimates and do not appear in any financial records. The manpower savings portions are identical to those used by the Army, but the fiscal portion contains gross savings estimates. (The Army nets out the difference in its reports.) Figure F-2-5 shows the cost avoidances estimated in the Air Force CSJF for Craig AFB and shows actual data (i.e., updated estimates based on events). In the only difference from the Army format, the Air Force does not include CHAMPUS as a cost category. All Air Force efforts to identify CHAMPUS account costs associated with closure actions have been unsuccessful because their bases have no involvement in recordkeeping for CHAMPUS.

5. Conclusions--Lessons Learned.

a. ESC did not expend as much effort on the Air Force closure action as it did for the Army cases. Data for this action came primarily from discussions with HQAF personnel in the CONUS Bases Division and was supplemented

by some reports and documents. Unlike research for the Army cases, no attempt was made to solicit information directly from the Air Force MAJCOM (i.e., the Training Command).

COST AVOIDANCES FOR CRAIG AFB CLOSURE
(FY 77 \$ Millions)

Category	CSJF Estimate	Actual
<u>Manpower (authorizations)</u>		
Officers	160	185
Airmen	734	800
Civilians	362	503
<u>Fiscal</u>		
Military Personnel	13.2	13.6
Civilian Personnel	5.3	6.7
Other O&M	6.7	6.6
Communications ^{a/}	(0.3)	--
Mil Family Housing	0.5	0.2
Total	25.7	27.1

^{a/} Included in other O&M.

Figure F-2-5

b. The Air Force quarterly tracking/monitoring report for realignment actions (see Figure F-2-6) was developed and implemented after the Craig AFB closure action was in progress. Therefore, the data have some deficiencies because they were reconstructed after the fact.

c. The Craig action was very similar to the Fort Wolters closure. It was completed according to schedule and within the estimates (both cost and personnel savings) provided in the predecision documentation.

d. Because the Air Force produces less paperwork than the Army for a closure action, ESC had much less documentation available for review. (See

CRAIG AFB CLOSURE VARIANCE ANALYSIS
(FY 77 Dollars in Millions)
March 1979

	Planning Estimate			Experience		
	612 Est	Begin- ning Est	Vari- ance (%)	Est	Actual	Vari- ance (%)
Cost Avoidance						
Manpower (Authorization)						
Officer	160	185	+15.6	185	185	--
Airman	734	800	+9.0	800	800	--
Civilian	362	503	+39.0	503	503	--
Fiscal						
Military Personnel	13.2	13.9	+5.3	13.6	13.6	--
Civilian Personnel	5.3	7.4	+39.6	6.8	6.7	-1.5
Other O&M	6.7	6.8	+1.5	6.6	6.6	--
Communications ^{a/}	(.3)	(.3)	--	--	--	--
Military Family Housing	.5	.5	--	.3	.2	-33.3
Total	25.7	28.6	+11.3	27.3	27.1	-0.7
One-time Costs						
Military PCS	2.5	2.2	-12.0	2.2	2.2	--
Civilian	--	--	--	--	--	--
PCS	.9	1.2	+33.3	1.2	1.0	-16.7
Severance and Leave	.3	.5	+66.7	.5	.5	--
Placement	0 ^{b/}	0	--	0	0	--
Homeowners Assistance	2.2	2.2	--	2.2	1.2	-45.5
Construction	0	0	--	0	0	--
Material Transportation	.4	.1	-75.0	.1	.1	--
Communications	.3	.2	-33.3	.2	.2	--
Other	.2	.2	--	.2	.1	-50.0
Total	6.8	6.6	-2.9	6.6	5.3	-19.7
Recurring Costs						
Caretaker	--	--	--	--	--	--
Military Personnel	2.0	1.0	-50.0	1.0	1.0	--
Civilian Personnel	2.4	1.2	-50.0	1.2	1.2	--
Other O&M	.4	.5	+25.0	.5	.5	--
Communications ^{a/}	0	0 ^{b/}	--	0	0 ^{b/}	--
Military Family Housing	0	.2	Inf	.2	.4	+50.0
CHAMPUS	0	0	--	0	0	--
Total	4.8	2.9	-39.6	2.9	3.1	+6.9

^{a/} Included in other O&M.

^{b/} Activity represents less than \$0.1 million.

Figure F-2-6

Annex A, Command Differences (Volume 1), for a more detailed treatment of Army and Air Force methods for closure actions.)

e. The Air Force developed the quarterly tracking report to monitor actions and to improve the estimates for future closure or realignment actions.

f. The Air Force adjusted all dollar amounts in the after action reports to allow for inflation. All dollar figures for Craig AFB were reported in constant FY 77 dollars.

g. The Air Force's quarterly tracking report permitted a revised estimate of costs and savings and thus did not always make comparisons with the original Craig AFB CSJF data. However, the report format shows the original estimate, revised estimate, and final costs.

h. The Air Force MAJCOM produced the quarterly reports. HQAF did not believe it cost-effective to develop an automated procedure to extract financial data for realignment actions. Therefore, the quarterly monitoring reports include estimates, re-estimates, and some "actual" data.

i. The quarterly (in-process) monitoring reports are relatively useless in their own right, but they do provide the mechanism for collecting data and being able to produce a respectable after action report for closure/realignment actions. The turnover of personnel requires some sort of interim report and formalized procedure.

j. An Air Force report cited several difficulties with its tracking report; these are partially quoted and paraphrased below:^{6/}

(1) Quarterly phasing of closure action milestones presents problems for the implementing commands (and installations). "When an action

^{6/} DAF, HQ, Air Tng Cmd, HQ, Base Closure Cost Reporting--Procedures, Sources, and Lessons Learned.

is taken may be of no consequence to the efficiency of getting the job done." Yet, by establishing milestones, variances from projections will exist. Explanations for these variances are required but are of questionable value.

(2) It is very hard to phase cost avoidances and recurring costs. "Management loses control over retirements, resignations and transfers when a closure is announced, and trying to phase these actions is purely guesswork."

(3) One-time costs can be audited reasonably well. But there exists no audit trail for cost avoidances or recurring costs from voucher to journal. "We must hypothesize that a dollar not spent is a cost avoided." This thinking runs counter to principles of auditing.

(4) Military and civilian space avoidances are based on authorizations. The estimate and actual tend to become one and the same. If standard pay factors are used in generating estimates, all of the savings estimates are assumed to have been attained when the planned action is accomplished. Civilian personnel spaces can be tracked with a high degree of accuracy. Military personnel spaces cannot. A tracking exercise for military personnel avoided by closure actions is a futile exercise.

(5) Some of the factors used in the Craig AFB CSJF estimates have no visibility at installation or command level. PCS costs are an example in this category. Some PCS expenses are not finalized for a year or more after the move occurs. This compounds accurate follow-up reporting.

(6) Transportation costs of hauling things away from the closing installation on government vehicles will probably not be captured in normal accounting and reporting systems.

(7) While the monitoring reports were laboriously and conscientiously submitted, the analysis accompanying them often suggested a skepticism

of the accuracy of information contained therein. Users of these reports must understand that the data they contain are not auditable.

(8) Estimating procedures for savings resulting from closure of military family housing quarters were faulty in early closure cases. (The error was that the transferring military personnel, who were not provided quarters at the new locations, generated costs in the housing allowance account. This increase in the housing allowance account must be subtracted from the projections of savings for closing family housing at the installation being closed.) Costs for retention of family housing quarters are difficult to estimate accurately because no one knows how long they will be maintained by the Government, especially if caretaker personnel are using these quarters while the base is being closed.

k. The focus on estimating costs and savings was at the Air Force or DOD level. The Air Force acknowledges impacts on other government agencies and programs and on community costs, but believes it cannot realistically address those factors.

APPENDIX F-3

CASE REPORT--FORT WOLTERS CLOSURE

<u>Paragraph</u>		<u>Page</u>
1	General Description	F-3-1
2	Action Taken	F-3-2
3	Economic Analysis	F-3-5
4	Tracking of Costs and Savings	F-3-10
5	Tracking of Events	F-3-15
6	Lessons Learned	F-3-17

Figure

F-3-1	Key Milestones--Army Aviation Flight Training Consolidation	F-3-3
F-3-2	Job Migration Diagram--Army Aviation Flight Consolidation	F-3-4
F-3-3	RRSR Based on CSJF and After Action Report Data	F-3-6
F-3-4	Economic Analysis of Army Flight Training Consolidation	F-3-8
F-3-5	Manpower Level Data Trail	F-3-14

1. General Description. In January 1971, it was first recommended that DA consolidate all Army aviation flight training at Fort Rucker, Alabama, and that Fort Wolters and Hunter Army Airfield be closed and placed in caretaker status. In June 1971, HQDA advised that Fort Wolters would stay active through CY 72 and that the recommended action should be studied further. In April 1972, the Director of Individual Training sent the Chief of Staff a decision paper on the consolidation.^{1/} On the 7th of that month, the Chief of

^{1/} DA, ODCSPER, Dir of Individual Tng, Elimination of USAAVNS Element (DF).

Staff approved the consolidation/closure. On 10 November 1972, the Commanding General, Third US Army, was tasked to prepare a CSJF and civilian reduction plan--suspense date was 27 November. The case study was delivered on time.^{2/} On 17 April 1973, the Secretary of Defense announced consolidation of US Army aviation training at Fort Rucker, Alabama. The consolidation/closure took place ahead of initial schedule and all primary flight classes were being conducted at Fort Rucker by November 1973. Fort Wolters was closed as planned but never was placed in caretaker status; it was excessed to the city of Mineral Wells, Texas. HAAF was not closed as initially planned and approved. On 7 February 1974,^{3/} a message from HQDA announced that HAAF would not be closed but would be used for stationing of a brigade-size unit to take advantage of the field's extensive training areas, firing ranges, and aviation facilities. The milestone chart at Figure F-3-1 lists the sequence of events in more detail.

2. Action Taken. The job migration diagram at Figure F-3-2 portrays the magnitude and nature of this consolidation. The November 1972 Fort Wolters CSJF indicated that some 1,546 positions would be involved at the three installations in question. Relocation to Fort Rucker of the USAAVNS All-1G (Cobra) training program at HAAF was projected to result in transferring 99 positions to Fort Rucker, reassigning 135 military positions elsewhere in the Army, and eliminating 97 civilian positions. Closure of Fort Wolters was projected to result in transferring 327 military and civilian positions to Fort Rucker and eliminating 917 positions (440 civilians and 447 military positions

^{2/} DA, USAAC, Consolidate All Army Aviation Training Now Being Conducted at Fort Wolters and Hunter AAF at Fort Rucker, Alabama. (Abbreviated to Fort Wolters CSJF in subsequent references).

^{3/} DA, HQ, DA Guidance--Realignments and Stationing Actions (message).

KEY MILESTONES--ARMY AVIATION FLIGHT TRAINING CONSOLIDATION

Event	Date
Recommended consolidation of all Army aviation flight training at Ft Rucker	18 Jan 71
HQDA advised Ft Walters would stay active thru CY 72	2 Jun 71
DCSPER to Chief of Staff, Decision Paper on consolidation	6 Apr 72
Chief of Staff approval closure/consolidation	7 Apr 72
Army proposal to caretaker HAAF disapproved, remainder of action approved	28 Jun 72
Tasker letter ATIT-PRS, CG 3d US Army to prepare CSJF & civilian reduction plan (suspense date 27 Nov 72)	10 Nov 72
EA Ft Walters published	20 Nov 72
CSJF Ft Walters transmitted to CONARC from HQ 3d US Army	27 Nov 72
CSJF HAAF published	10 Jan 73
SECDEF announces consolidation of US Army aviation training at Ft Rucker	17 Apr 73
Request from Ft Rucker to increase manpower due to consolidation	23 Apr 73
Consolidation Task Force established at Ft Rucker	24 Apr 73
Contract negotiations begin	late Apr 73
Implementation Order--message (effective on receipt, 2 May)	30 Apr 73
Two officers assigned to Ft Rucker	2 May 73
CONARC Conference	9 May 73
Due date for comments on milestones	15 May 73
Milestone moved up from July to June for 1st Primary course	16 May 73
Begin design specs for MCA	21 May 73
Letter to CG USCONARC saying ELS not required for Ft Walters	31 May 73
Flight training contract awarded	25 Jun 73
CSJF calls for transfer of Primary Flight Training to Ft Rucker	1 Jul 73
Initiate contractor MOI Training AAVNS	16 Jul 73
All AH-IG training terminated at HAAF	23 Jul 73
Preflight training begins at USAAVNS	30 Jul 73
CSJF calls for inactivation of other Ft Walters units	1 Oct 73
Quarterly Situation Report 1 Jul 73-30 Sep 73	12 Oct 73
Quarterly Report says all Primary Flight classes being conducted at Ft Rucker	19 Nov 73
Quarterly Situation Report 10 Oct 73-31 Dec 73	22 Jan 74
Message HQDA--decision not to close HAAF	7 Feb 74
After Action Report, Consolidation of Army Aviation Training at Ft Rucker	20 Feb 74
CSJF calls for complete caretaker of Ft Walters	Jun 74
Ft Walters excessed to Mineral Wells	1975-1977

Figure F-3-1

JOB MIGRATION DIAGRAM--ARMY AVIATION FLIGHT CONSOLIDATION^{a/}

Ft Stewart (HAAF)	Mil	Civ	Total
Before (31 Oct 72)	3,696	1,548	5,244
Transfer Out	87	12	99
Eliminate	136	97	233
After	3,473	1,439	4,912

Eliminate
97 civ
Reassign
136 mil

Transfer
87 mil
12 civ

Ft Wolters	Mil	Civ	Total
Before (15 Dec 72)	727	646	1,373
Transfer Out	246	81	327
Eliminate	477	440	917
After	4	125	129

Transfer
246 mil
81 civ

Eliminate
447 mil
440 civ

Ft Rucker	Mil	Civ	Total
Before	4,781	2,327	7,108
Transfer	333	93	426
After	5,114	2,420	7,534

^{a/} SOURCE: Fort Wolters CSJF.

Figure F-3-2

to be transferred elsewhere in the Army). Fort Rucker's work force would increase by 426 (from 7,108 to 7,534). As indicated in the Fort Wolters CSJF, both Fort Wolters and HAAF would be closed and put in a caretaker status. Fort Wolters would retain 129 full-time personnel to conduct the caretaker function. This plan was executed as far as personnel and function transfers are concerned, but the physical installation disposition did not occur as stipulated in the CSJF. The 129 personnel at Fort Wolters for caretaker functions were also eliminated, thereby increasing the anticipated recurring savings to result from this action. HAAF was not closed and placed in caretaker status; but once it was no longer a Cobra training site, it was designated home for a brigade-size unit. Thus, this change in mission for HAAF clouds the costs and savings picture somewhat.

3. Economic Analysis. The one-time cost of the closure/consolidation action was projected to be \$7,332,500 as broken out in the Fort Wolters CSJF estimate column of Figure F-3-3. The recurring costs and savings were projected to be \$16,341,400, as calculated in Figure F-3-4 (an extract from the economic analysis data sheets included in the Fort Wolters CSJF). This plan is carefully calculated and appears logical. Tracking actual costs against these projections, however, creates a different impression.

a. The savings to be created by this consolidation action were generated primarily from BASOPS, OMA, and MPA functions no longer required at Fort Wolters and HAAF and being assumed at much lower rates at Fort Rucker. Figure F-3-4 shows that \$15,229,000 in mission funds would be saved by closure of Fort Wolters, that \$3,217,600 in mission funds would be saved by closure of HAAF, and that these functions would be picked up by Fort Rucker at an increased cost of \$13,266,800. The result would be a savings in mission funds

RRSR BASED ON CSJF AND AFTER ACTION REPORT DATA

	CSJF Estimate (\$)	Actual Expense/ (\$)	% Variance
<u>Manpower Savings (Authorizations)</u>			
Officer	254		
Warrant	105		
EM	228	586 (all mil)	
Civilian	537	877	
Total Manpower Savings	1,124	1,463	
(Total actual expenses could be more since HAAF & Fort Wolters reported losses of 1,826. Fort Rucker also lost, but this was due to other actions.)			
<u>Recurring Costs/(Savings):</u>			
MPA	7,321,900		
OMA/P2 BASOPS	7,197,300		
OMA/Mission	1,762,000		
Communications	(165,000)	Incl in OMA	
Military Family Housing	60,200		
Other OMA	--		
Total Recurring Costs/(Savings)	16,341,400		
<u>One-time Costs/Cost Avoidance</u>			
Military Personnel			
Movement of Personnel/Dependents	139,500		
Movement of Household Goods	515,600		
Dislocation Allowances	123,100		

(Figure F-3-3 Continued on Next Page)

RRSR BASED ON CSJF AND AFTER ACTION REPORT DATA--Continued

	CSJF Estimate (\$)	Actual Expensed/ (\$)	% Variance
<u>One-time Costs/Cost Avoidance--Continued</u>			
Civilian Personnel			
Terminal Leave Payments	415,200	95,487.12 ^{b/}	
Severance Pay	1,541,300	221,040.00	
Relocation Costs	229,200	535,589.46 ^{b/}	
Placement and Training	--		
Transportation of Supplies &			
Equipment (+Aircraft & Crating)	62,000(+784,500)	126,777.00	
Cost of Putting Installation			
in Caretaker	869,600	1,939,338.00	
Cost of Homeowners Assistance			
Program	1,106,300		
Construction	471,700		
Other (Identify)			
Total One-time Costs/(Cost Avoidance)	7,332,500	5,957,334.00 ^{c/}	
Total DOD Costs/(Savings)	Not Obtainable	Not Obtainable	

a/ Source of "Actual Expense" column: DA, USAAC, USAAVNS, After Action Report Consolidation of Aviation Training at Fort Rucker, Alabama. (Referred to as Fort Wolters After Action Report in subsequent references.)

b/ HAAF only.

c/ Incomplete as of 31 Dec 73 because it lacks cost of some property shipments from Fort Wolters and the MCA expenditures.

Figure F-3-3

ECONOMIC ANALYSIS OF ARMY FLIGHT TRAINING CONSOLIDATION
(Per Fort Walters CSJF, Nov 1972)

	Walters	Hunter	Rucker	Total
<u>Current Annual Operating Costs</u>				
Mission				
OMA	11,510,000	7,962,900	36,445,400	55,918,300
MPA	3,719,000	24,384,900	26,841,300	54,945,200
BASOPS				
OMA	9,029,300	20,487,700	33,886,300	63,403,300
MPA	4,549,300	6,471,000	18,667,300	29,687,600
Total (Mission & BASOPS) OMA	20,539,300	28,450,600	70,331,700	119,321,600
Total (Mission & BASOPS) MPA	8,268,300	30,855,900	45,508,600	84,632,800
<u>Annual Operating Costs After Closure</u>				
Mission				
OMA	--	6,846,600	47,309,700	54,156,300
MPA	--	22,283,600	29,243,800	51,527,400
BASOPS				
OMA	1,312,500	20,270,400	34,623,100	56,206,000
MPA	50,400	6,471,000	19,262,100	25,783,500
Total (Mission & BASOPS) OMA	1,312,500	27,117,000	81,932,800	110,362,300
Total (Mission & BASOPS) MPA	50,400	28,754,600	48,505,900	77,310,900
<u>Savings After Closure</u>				
Mission				
OMA	11,510,000	1,116,300	10,864,300	1,762,000
MPA	3,719,000	2,101,300	2,402,500	3,417,800
BASOPS				
OMA	7,716,800	217,300	736,800	7,197,300
MPA	4,498,900	--	594,800	3,904,100
Total (Mission & BASOPS) OMA	19,226,800	1,333,600	11,601,100	8,959,300
Total (Mission & BASOPS) MPA	8,217,900	2,101,300	2,997,300	7,321,900
Total Annual Recurring Savings--MPA & OMA				16,281,200
Total FHMA Savings				60,200
Total Annual Recurring Savings--MPA, OMA, FHMA				16,341,400

Figure F-3-4

of \$5,179,800. The BASOPS savings are primarily in military and civilian personnel and related expenses and in communication and contract services. These account for the remaining \$11,101,400 in projected savings.

b. The remaining BASOPS expenses to be incurred after the consolidation and closure action are the result of caretaker expenses. At Fort Wolters this amount was projected to be \$1,362,900 per year. Because Fort Wolters was excessed to Mineral Wells, Texas, this caretaker expense can be added to the annual savings (cost avoidance). The case with HAAF is a little different. The USAAVNS element, which trained fixed wing and rotary wing aviators, was relocated to join the remainder of the Army's aviation training program at Fort Rucker, Alabama. The support personnel were transferred to Fort Stewart and Fort Campbell. The installation, however, was not closed and placed in caretaker status. Thus, the projected \$580,100 allocated to this one-time expenditure were not rendered. The installation is now a FORSCOM post of 3,600 active duty and civilian personnel assigned to the 260th Quartermaster Battalion and the 145th Aviation Battalion. The hospital which had been slated for closure is now an outpatient clinic. Thus, the limited BASOPS savings projected (\$217,300) in the November 1972 Fort Wolters CSJF were not realized from an Army perspective, although the TRADOC budget may reflect some savings in the aviation training function.

c. MCA expenditures required at Fort Rucker as a result of this consolidation were minimal (\$471,700) and could therefore have no driving effect on the economic aspects of this action.

d. The elimination of 537 civilian employees (440 at Fort Wolters, 97 at Fort Stewart) is a key element of the cost-effectiveness of this consolidation. These recurring expenses would no longer be incurred at either Army

or command budgeting levels; thus a real money savings is possible. The reassignment of 613 military personnel out of the aviation training function is a savings of MPA to TRADOC and their installations, but is only an operational effectiveness gain to the Army as a whole.

4. Tracking of Costs and Savings. Figure F-3-3 is incomplete and at first glance may be confusing; its main function in this write-up is to serve as a vehicle for discussion of data availability, accuracy, and relevance.

a. Accuracy. The column "CSJF Estimate" represents the information shown in the Fort Wolters 1972 CSJF. The data included in the Personnel Analysis and Economic Analysis sections of the Fort Wolters CSJF are rearranged in Figure F-3-3 in the current (May 1981) format for reporting actual on-going actions in relation to their projected progress (i.e., the RRSR format). The column titled "Actual Expense" represents the information reported in the February 1974 Fort Wolters After Action Report. Many of the line items were capable of being entered within the RRSR format. Although the one-time cost totals cited in the Fort Wolters After Action Report must be accepted as being accurate--lacking evidence to the contrary--some apparent contradictions in the projected and actual data totals caused further research which revealed problems with the Fort Wolters CSJF projections.

(1) The November 1972 Fort Wolters CSJF projections of consolidated (Wolters, HAAF, Rucker) one-time costs were \$7,332,500. Fort Wolters costs were projected to be \$5,757,500; Fort Rucker's costs, \$994,900; and HAAF closure costs were estimated at \$580,100. When the Fort Wolters After Action Report of February 1974 reported one-time costs for HAAF as being \$2,700,967, these CSJF estimates required further scrutiny. A CSJF for closure of HAAF,

Georgia, dated 10 January 1973^{4/} was published 2 months after the Fort Wolters CSJF which covered the overall consolidation action. That January 1973 HAAF CSJF indicated a projected one-time closure expense of \$3,439,700. The sum appeared much more reasonable in light of the size of the installation, the number of individuals involved, and the figures in the after action report. Thus, the initial order of magnitude projections for the consolidation action, as projected in the November 1972 Fort Wolters CSJF, become questionable.

(2) The economic analysis data reported in the Fort Wolters CSJF and reformatted in Figure F-3-4 indicated a recurring annual savings of \$16,341,400--some \$1,333,600 of which it attributed to closure of HAAF. The January 1973 HAAF CSJF projected annual recurring savings of \$10,000,000. This, too, is a major order-of-magnitude difference between the two documents.

(3) The personnel savings in the Fort Wolters CSJF are projected based on 322 dislocations, whereas the HAAF CSJF cites 1,674 dislocations. Since the latter figure more closely corresponds to the current capacity of HAAF (3,600), the November 1972 Fort Wolters CSJF appears more suspect than ever in its roll-up data. This is especially relevant when the Fort Wolters After Action Report indicates that HAAF authorized strength fell from 1,822 on 30 June 1972 to 47 on 30 September 1973. There must be some logical explanation for all these contradictions, but it is not apparent from the documentation or correspondence pertaining to this action.

(4) The major discrepancies cited above make it futile to try to trace even the one-time costs, which in other case studies have generally proven relatively easy to trace.

^{4/} DA, FORSCOM, HQ, Hunter Army Airfield, Georgia. (Abbreviated to HAAF CSJF in subsequent references.)

b. Availability. The existence of two CSJFs and an after action report were encouraging signs which appeared to bode well for the prospects of tracking this consolidation action. The availability of CSFOR-78 Reports^{5/} provided a cross-check of the after action report bottom-line figures. The 1973 and 1974 Fort Rucker Historical Supplements^{6/7/} provided cross-checks on the Fort Wolters After Action Report and substantiated the completion of equipment shipments and proposed construction. Despite the availability of all these data, they are only partial or unexplained and make direct comparison impossible. For example:

(1) Figure F-3-3 indicates that, as of February 1974, \$5,967,334 had been spent on the consolidation effort. The after action data show that \$694,197 had been spent at Fort Rucker, \$2,572,170 at Fort Wolters, and \$2,700,967 at HAAF. The HAAF expenditure data were provided in line item form which enables the entries to be compared with the CSJF expenditure projections. The Fort Wolters and Fort Rucker data, however, were reported as totals and can be used only as general indicators of expenditure levels. Because the HAAF data alone represented almost double the total one-time cost estimates presented in the November 1972 Fort Wolters CSJF, one is tempted to conclude that the overall one-time cost of the consolidation action should be at least double that projected in the CSJF. The Fort Wolters After Action Report, however, indicated expenditures of \$1,365,166 less than the estimate. This leaves three distinct possibilities: only Hunter was underestimated and the other two were overestimated, these incomplete figures were more incomplete than indicated, or the after action report was compiled from incorrect data.

5/ DA, TRADOC, HQ, DCS, Resource Mgt, CSFOR-78.

6/ DA, TRADOC, Fort Rucker Historical Supplement--1973.

7/ DA, TRADOC, Fort Rucker Historical Supplement--1974.

(2) The unavailability of personnel with first-hand knowledge of this action keeps the picture cloudy. Personnel now at Fort Rucker who tried to track this action in 1975 stated that they could not do so because data were not available at that time and because what was available was not directly comparable to the actual occurrence of events under the consolidation. For example, the flight training contract with Southern Airways at Fort Wolters included instructor pilots, BASOPS functions, and maintenance. The contract with Doss Aviation at Fort Rucker covered only pilots. A separate maintenance contract was negotiated and BASOPS were conducted by post personnel. Thus, comparing pre-consolidation with post-consolidation contracts would be meaningless. The unavailability of the data makes the whole issue moot.

c. Relevance. The tracking of cost data in this consolidation action seems impossible, both because projections appear to have been incomplete and actual data are at least incompatible. The tracking of events and manpower level changes was much more successful.

(1) The information in Figure F-3-5 shows that Fort Wolters did in fact close to at least caretaker status by June 1974. Correspondence in TRADOC files substantiates that the installation was excessed to Mineral Wells, and hence required no caretaker function. Thus, certain projected civilian personnel savings did occur and probably would justify the action as being cost-effective even if nothing else were substantiated.

(2) The Fort Wolters After Action Report of February 1974 cites the HAAF strength as being 47 civilians as of September 1973. Correspondence indicates that, as of January 1974, TRADOC personnel were aware that HAAF

MANPOWER LEVEL DATA TRAIL

Data Source	Date	Mil	Civ	Total
<u>Fort Wolters</u>				
CSJF	Nov 72	696	694	1,390
Feb 74 After Action Report	Nov 72	720	649	1,369
CSJF Update (Nov 72)	Dec 72	727	none reported	727
CSJF Nov 72 Projection	Jun 73	629	550	1,179
CSJF Nov 72 Projection	Feb 74	4	125	129
After Action Report	Dec 73	207	299	506
CSFOR-78 Actual	Jun 74	3	60	63
<u>Fort Stewart (HAAF)</u>				
Feb 74 After Action Report	Jun 72	1,909	452	2,361
CSJF Current	Nov 72	3,696	1,548	5,244
CSJF Nov 72 Projection	Jun 73	3,473	1,439	4,912
After Action Report	Sep 73	0 ^{a/}	47	47
<u>Fort Rucker</u>				
Feb 74 After Action Report	Jun 72	4,856	2,302	7,158
CSJF Nov 72	Sep 72	4,781	2,327	7,108
CSJF Nov 72 Projection	Jun 73	5,114	2,420	7,534
Feb 74 After Action Report	Dec 73	4,038	1,983	6,021
CSFOR-78 Report Actual	Jun 74	2,524	2,201	4,725
CSFOR-78 Report Actual	Jun 75	2,752	2,272	5,024

^{a/} After Action Report of 0 military and 47 civilians for caretaker force at HAAF should be taken to be accurate, while CSJF Nov 72 projection of 3,473 military and 1,439 civilians should be understood as representing Fort Stewart strength (projected) once HAAF is closed--both are the same.

Figure F-3-5

would not be placed in caretaker status ^{8/} Thus, the Fort Wolters After Action Report was incomplete on this major point and should have had more accurate and relevant information.

(3) The Fort Wolters After Action Report shows Fort Rucker's strength as being 6,021 in comparison with the projected 7,534 and cites other on-going actions as causing a drawdown at Fort Rucker. The June 1974 CSFOR-78 actual data for Fort Rucker indicate a significant reduction in military personnel strength, below both the Fort Wolters CSJF projection and the after action report totals. Actual civilian personnel strengths are well below the Fort Wolters CSJF projections and are only slightly above the totals shown in the after action report. Thus, Rucker did assume the complete Army aviation training program while undergoing a strength reduction. Other ongoing actions, however, complicate this consolidation and make its impact impossible to measure accurately. The historical summaries for Fort Rucker note assumption of the entire aviation training function only as having had an organizational structure effect and as requiring some rather slight construction, which was programmed and funded. The relevant events projected actually occurred, apparently without a hitch.

5. Tracking of Events.

a. The Quarterly Situation Reports, Consolidation of Aviation Training, which were submitted by DA message and thus available in TRADOC project files, ^{9/} enabled close tracking of events against the milestones for consolidation as stated in USAAVNS message of May 73. ^{10/} These quarterly reports

^{8/} DA, HQ, DA Guidance--Realignment and Stationing Actions (message.)

^{9/} DA, USAAC, USAAVNS, Quarterly Situation Report, Consolidation of Aviation Training (Messages--Jun, Jul, and Oct 73 and Jan 74).

^{10/} DA, USAAC, USAAVNS, Consolidation of Aviation Flight Training (Message).

actually proved more useful than the after action report. They substantiated that consolidation events occurred either on schedule or ahead of schedule. The after action report merely reiterated these quarterly situation reports in less detail and provided incomplete summary cost data which were more confusing than enlightening. The major events to be tracked are listed in Figure F-3-1, the list of relevant consolidation milestones. The historical summaries of 1973 and 1974 for Fort Rucker indicate initially that required MCA was programmed and funded; and, subsequently, that at least some of it had been completed--construction of an additional runway lane.

b. The Report of Economic Adjustment Program, Mineral Wells and Weatherford, Texas, is a comprehensive assessment of the economic impact of closing Fort Wolters.^{11/} It gives very specific guidance on what the community might do to mitigate the negative impacts. Although this ESC project did not track the economic development of that community since the closure of Fort Wolters in 1974, it would be easily possible to go through the Chambers of Commerce or City Manager to track their efforts to follow the EAC's recommendations.

(1) The EAC itself compiled a summary report containing data on 91 communities with completed base reuse programs.^{12/} That report was compiled and published by the EAC in September 1979 and contained some information on the Fort Wolters closure. Following closure in 1974, the city of Mineral Wells, Texas, acquired the base facilities over the period 1975-1977. The 1,219 civilian jobs lost and 692 military personnel transferred were

^{11/} DOD, OASD(I&L), Ofc of Economic Adjustment, Report of Economic Adjustment Program Mineral Wells and Weatherford, Texas.

^{12/} DOD, OASD(MRA&L), Ofc of Economic Adjustment, President's EAC, Summary of Completed Military Base Economic Adjustment Projects, 1961-1979.

reported as being replaced by 1,400 jobs on base and 340 direct off-base jobs. These jobs were primarily with Optron, Inc., Electronic Components, Inc., Ford Manufacturing, Northridge Oil, Perry Equipment, Airline Instruments, Inc., Butler Vintamatic, Illinois Tool, J-Mack, Weatherford College, and General Aviation Airport. There were a reported 400 college and 50 high school Vo-Tech students attending classes in what had previously been Fort Wolters' facilities.

(2) It is interesting to note that the number of military positions on post prior to closure (according to the EAC) is very close to the number cited in the Fort Wolters CSJF. However, the number of civilian jobs attributed by the EAC to Fort Wolters is about twice that indicated in the CSJF. Looking back at the EAC's November 1973 report, it indicates that in FY 73 Fort Wolters employed 778 military personnel, 669 civilians, 672 Southern Airways contractor employees, and processed 498 students, for a total on base of 2,617. The 1979 survey indicates that 1,740 civilian positions and 450 students have filled the void caused by the Fort Wolters closure. The projected reuse figure from the 1973 study was 1,000 jobs. Thus, it appears that the EAC's projects/intervention/techniques were more successful than anticipated. Many specific EAC suggestions were followed and many general recommendations were developed into successful economic ventures.

6. Lessons Learned.

a. CSJF reporting requirements and followup reporting requirements have evolved into a more efficient and effective format since 1972. They now communicate most of the relevant information. If the information contained in the older CSJFs had been reported accurately and comprehensively, that data could have been rearranged according to more recent formats to allow relevant comparisons.

b. Although the columns and rows may be accumulated accurately, this is no indication that the data are accurate. The major discrepancies between the November 1972 and January 1973 CSJF data, which apply to the same case, display the point in question.

c. The Fort Wolters After Action Report is an example of how the prior reporting requirements were inadequate and led to the more recent improvements. This report appears comprehensive until studied in detail. It is then apparent that only total data are reported for Fort Wolters and Fort Rucker, while line item data are reported for HAAF. These line items, however, are not arrayed in any relevant format or categories and thus are difficult to compare with CSJF categories and projections. This would be possible, though, if Fort Wolters and Fort Rucker data had been reported in the same format. This after action report is also an example of the premature closing date for data reports. The failure of HAAF to close and the excessing of Fort Wolters certainly must have drastically affected final cost totals. The data to substantiate this impression are unavailable because the case documentation was closed prematurely.

d. Lack of personal explanations--no institutional memory--certainly impairs the tracking process. Although many individuals were acquainted with the action in general, no one was available who had specific information. The records retirement policies result in very little background information being available.

e. The extremely fluid nature of organizational structure, size, and function compounds the tracking of "recurring" costs and savings to the point of making it not only impossible in this case study, but nearly impossible in any real-world situation which one would postulate for a tracking exercise.

i. The difference in accounting reports among the three Army commands makes it difficult to track any consolidation or realignment which crosses commands. It also makes it difficult to conceive of a system which would enable tracking for all three commands.

g. The availability of AMS code data in the CSJF helps the analyst who is attempting to track the actual costs of a realignment action.

h. The changes in decisions made subsequent to the implementation order (e.g., not to caretaker HAAF and Fort Wolters or not to excess Nike-Hercules sites as with the ADA realignment case at FORSCOM) impact on the action to such an extent that it is difficult to know what perspective to take in the tracking (i.e., tracking of installation savings, command savings, Army savings, or DOD savings).

i. The lack of an LOI (as FORSCOM had developed) or of an implementation plan (as developed at DARCOM) did not appear to impede the consolidation action.

j. The relatively brief time required to implement the action greatly simplified the tracking requirements--certainly it would have been more difficult if it had extended over a greater period of time and had experienced more changes in decision, manpower levels, and functional adjustments.

APPENDIX F-4

CASE REPORT--MP SCHOOL RELOCATION

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1. Background. The decision to relocate the US Army Military Police School was affected by several other actions.

a. In July 1973, Army forces in CONUS underwent a major reorganization. The reorganization created TRADOC and FORSCOM. TRADOC is responsible for individual training and service school operations, while FORSCOM is responsible for unit readiness. In conjunction with the reorganization, the US Army Chemical Center and School at Fort McClellan was discontinued.

b. In April 1973, the Secretary of the Army announced that the USAMPS would relocate from Fort Gordon, Georgia, to Fort McClellan. Relocation, originally scheduled for completion 1 June 1974, was suspended on

9 August 1973 because Congress had not approved the necessary MCA funds. Following a comprehensive review, the Secretary of the Army announced on 8 February 1974 that the relocation would proceed.

c. Relocation of the USAMPS was supported by a detailed costs and savings analysis. Other considerations included accessibility, encroachment, available training areas, environmental impacts, and community impacts. The action was desired for two reasons:

(1) The available permanent facilities at Fort McClellan were economically attractive to the USAMPS. Supporting rationale cited the Army's desire to maximize the use of existing permanent facilities rather than building new ones.

(2) A "true" home for the USAMPS community would establish the desired esprit-de-corps and enhance the attractiveness of the Army. The relocation would have a positive effect on the morale of the personnel involved.

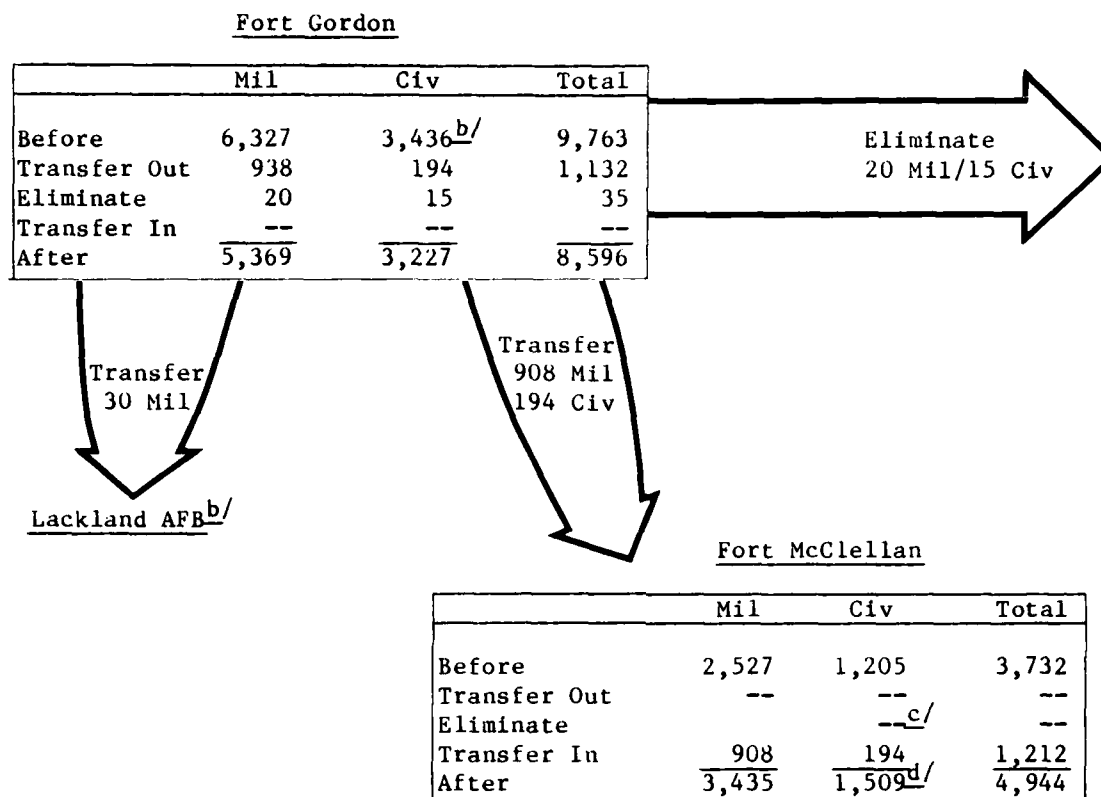
2. Description of Action^{1/}

a. The realignment action affected 319 civilian positions and 958 military positions. Of the civilian positions, 304 were transferred and 15 eliminated. The respective numbers for the military positions were 908 and 20. The remaining 30 military positions were transferred to Lackland AFB, Texas, to support the dog training program. Figure F-4-1 is a job migration diagram showing the movement of these positions.

(1) In the USAMPS CSJF (dated 8 February 1974), the base case for Fort Gordon excluded the Lackland AFB transfer. This created some confusion since the 30 military positions were often addressed in correspondence.

^{1/} DA, FORSCOM, HQ and TRADOC, HQ, CONCISE Case Study Justification Folder, MP School #166. (Abbreviated to USAMPS CSJF in subsequent references.)

JOB MIGRATION DIAGRAM--USAMPS RELOCATION^{a/}



- ^{a/} SOURCE: USAMPS CSJF.
- ^{b/} Base case is after Lackland AFB transfer.
- ^{c/} 110 spaces had previously been authorized for USAMPS support--end
FY 74.
- ^{d/} Total does not add.

Figure F-4-1

(2) It is interesting to note that, prior to the CSJF, 110 civilian positions had been authorized at Fort McClellan to support the relocation. It appears that these positions were transferred along with the main body during implementation; yet, they were not considered in the economic analysis.

b. Figure F-4-2 shows significant dates and milestones with respect to the USAMPS relocation. A series of both STEADFAST and revised CONCISE realignment actions affected Fort McClellan during this time period. The following actions were proposed in the Installation Analysis Folder.

DATES AND MILESTONES OF USAMPS RELOCATION^{a/}

Event	Date
CSJF completed--USAMPS relocation to Fort Devens not justified	22 July 1971
Criminal Investigations Command established	6 August 1971
Task to revise CSJF (USAMPS to Fort Devens)	22 September 1971
Task to perform CSJF (USAMPS to Fort McClellan)	23 September 1971
CSJF forwarded	23 December 1971
Decision--USAMPS remains at Fort Gordon	4 February 1972
CSJF revised	15 February 1972
TRADOC established	1 July 1973
Chemical School disestablished	October 1973
CSJF completed	21 November 1973
CONCISE Executive Summary	15 December 1973
Implementation milestones established	1 February 1974
Revised CSJF (Final) published--final decision announced	8 February 1974
Implementation milestones updated	25 March 1974
OPLAN MOHAR (Implementation Plan) completed	1 June 1974
Phase I of Implementation begins	1 June 1974
Phase I of Implementation completed	30 June 1974
Phase II of Implementation begins	1 December 1974
Phase II of Implementation completed	31 January 1975
Phase III of Implementation begins	1 June 1975
Phase III of Implementation completed	31 August 1975

^{a/} SOURCE: USAMPS After Action Report.

Figure F-4-2

(1) By end FY 74, reduce USWACCS basic training mission from 3 battalions (14 companies) to 2 battalions (9 companies).

(2) By end FY 75, relocate USAMPS.

(3) By 1 October 1977, eliminate USWACCS officer training.

(4) By end FY 78, relocate two basic combat battalions to Fort McClellan.

3. Implementation.^{2/}

a. Relocation of the USAMPS extended over a period exceeding 1 year because of the need to maintain continuous uninterrupted training and the requirement to modify, renovate, and perform new work on facilities.

(1) Phase I (1-30 June 1974)--relocation of Advance Party (6 military, 2 civilians).

(2) Phase II (1 December 1974-31 January 1975)--relocation of Deputy Commandant for Combat and Training Development (44 military, 23 civilians), Department of Army Wide Training Support (16 military, 15 civilians).

(3) Phase III (1 June-31 October 1975)--Relocation of main body (659 military, 103 civilians).

b. Phase I commenced on 30 June 1974 with the creation of an advance party. The mission of this group was to plan, coordinate, and expedite all actions up to Phase III. The group prepared a weekly activity report to provide the feedback necessary to assist in the adjustment of BASOPS plans. This report included a summary of actions completed during the week, a description

^{2/} DA, TRADOC, USAMPS, After Action Report, United States Army Military Police School Relocation from Fort Gordon, Georgia to Fort McClellan, Alabama, 30 June 1974 to 31 August 1975. (Abbreviated to USAMPS After Action Report in subsequent references.)

of problem areas and recommended solutions, and a projection of the ability to maintain all activities on schedule.

c. Phase II commenced on 1 December 1974 and concluded on 31 January 1975 with the successful movement of two staff agencies. This phase went smoothly since these organizations required minimal interface with Fort McClellan, and post housing was plentiful. There was little or no disruption of workload and mission.

(1) In April 1975, the Brigade Commander established an advance party not otherwise programmed. Its purpose was to renovate and otherwise prepare the billeting area for occupancy. In addition, a special planning group was established with the onset of Phase II. The major contribution of this group was to recommend the allocation of limited resources--especially barracks, administrative space, and classrooms.

(2) The civilians assigned to Phase II activities were canvassed to determine acceptability of transfer. Of 38 canvassed, 7 accepted. There was little difficulty in hiring during this phase.

d. Phase III began on 1 June and concluded on 31 August 1975--2 months ahead of schedule. In total, 20 staff and unit organizations moved during this period. Lessons learned in the earlier phases were published in advance and became planning tools for the larger move. On 1 July 1975, support of the relocation moved to Fort McClellan. Phase III was also accomplished without any break in performance or mission.

(1) Various Phase III advance parties were taken from functioning personnel assets at Fort Gordon in the 3 months preceding 1 June 1975. As newly assigned personnel went to Fort McClellan, USAMPS elements at Fort Gordon diminished to 75 percent of authorized strength. Detailed occupancy

plans for each room of every building allowed the USAMPS to settle into planned assets without incident.

(2) The move preceded completion of an MCA-funded barracks complex by 2 years. To support Phase III, semi-permanent barracks were improved by an extensive self-help effort. In some instances, there was premature occupancy; however, this did not prove to be a major problem. Funding provided BASOPS funds for renovation at special sites. A drain on available BASOPS funds resulted.

(3) Of 87 civilians canvassed, 20 elected to transfer. (Actual strength was below authorized levels due to individuals seeking and obtaining other employment.) Personnel who did not choose to relocate were offered other positions or retired. The hiring of needed personnel created several problems. Existing job descriptions were not compatible with Fort McClellan's Civilian Personnel Office requirements. Also, there were few civilian applicants with a previous background in a military law enforcement environment. This necessitated training programs and overlap hiring.

4. Economic Analysis.

a. One-time costs. Figure F-4-3 shows the costs of the USAMPS relocation, including required facilities. The actual cost figures, as detailed in the USAMPS After Action Report, are displayed for comparison purposes. The validity of individual cost projections cannot be challenged. There is no exact relationship between the cost elements stated in the CSJF and those stated as actual costs. With this in mind, the following observations can be made.

ONE-TIME COSTS--USAMPS RELOCATION
(\$ 000)

CSJF			Actual	
1. Cost of Realignment				
Military Personnel		295.4	Civilian Pay	134.0
Movement	30.0		Travel	12.2
HHG	223.3		Transportation	22.5
Dislocation	<u>42.1</u>			
Civilian Personnel		60.7	Contractual	86.8
Terminal Leave	21.4		Supplies	7.0
Relocation	<u>39.3</u>			
Movement of TOE/TDA equipment		6.0	Total (as of 31 Oct 75)	262.5
Transportation of supplies and equipment		0.9	Estimate of remaining	101.0
		<u> </u>		<u> </u>
Total		363.0	Total	363.5
2. Facilities:				
Required	18,619.9		Cost	17,197.8
Saved	<u>16,399.0</u>		Saved	<u>16,399.0</u>
Facilities Net		<u>2,220.9</u>	Facilities Net	<u>798.8</u>
Total Cost		2,583.9	Total Cost	1,162.3

Figure F-4-3

(1) A major portion of the one-time costs for realignment was civilian pay. It is not evident how this cost element was handled in the USAMPS CSJF.

(2) The total cost of realignment (including projections after 31 October 1975) corresponds very closely with the figures stated in the

study. This occurs even though, as stated above, the actual categories do not appear to be the same. Since "projected" equals "programmed" and "programmed" equals "actual," the total amount is expected to be the same.

(3) Approximately 86 percent of the one-time costs are attributed to facilities. If the one-time cost of relocating is only \$363,000, a very slight recurring savings will offset the one-time costs within a reasonable payback period. Also, establishing the cost of facilities depends largely on the value accorded to cost avoidance. This makes the accuracy of facilities cost projections questionable--all one needs to do to justify an action is to have MCA offset by MCA avoided.

b. Recurring savings. Figure F-4-4 shows the estimated annual recurring costs and savings for Forts Gordon and McClellan. Although one-time costs and savings were reported quarterly, no serious attempt was made to roll up or track recurring savings either quarterly or after the action. Thus, the reconstruction of the data at this later date is impractical. However, some benefit can be gained by analyzing the critical elements.

(1) Figure F-4-5 displays the ordered net annual savings by type of expenditure. Personnel savings are 73 percent of the total savings. This statistic is overshadowed by the fact that over five times as many spaces were eliminated as a result of manpower surveys at Fort McClellan during FY 76 and FY 77.

(2) Based on the projections given in the USAMPS CSJF, the payback period was calculated to be 7.54 years. This is the length of time required to recover the one-time costs with annual recurring savings. If personnel savings (only 20 military and 15 civilian positions), the payback period becomes 27.43 years. In an action of this nature,

ANNUAL RECURRING SAVINGS^{a/}
(\\$000)

	<u>Fort Gordon</u>		<u>Fort McClellan</u>	
	<u>Before</u>	<u>After</u>	<u>Before</u>	<u>After</u>
Military	49,851.6	41,236.6	20,018.8	28,495.5
Civilian	33,911.3	30,891.8	11,681.3	14,590.7
Travel	708.6	606.1	323.8	427.7
Transportation	155.3	146.3	24.4	24.4
Communications	88.1	85.9	51.0	51.6
Rent/Utilities	2,215.1	2,012.5	1,092.0	1,244.5
Other Contractor	4,710.4	4,268.7	3,924.0	4,455.8
Supplies/Materials	7,324.8	6,557.7	2,643.8	3,300.8
Equipment	840.4	741.0	175.0	262.1
Other	62.7	51.4	-9.0	-.3
Total	99,868.3	86,598.0	39,925.1	52,852.8
Reimbursables	1,995.2	1,984.2	1,393.7	1,404.7
Total	101,863.5	88,582.2	41,318.8	54,257.5
	Decrease = 13,281.3		Increase = 12,938.7	

Savings = 342.6/yr

a/ SOURCE: DA, TRADOC, HQ, DCS, Resource Mgt, CSFOR-78.

Figure F-4-4

ORDERED ANNUAL SAVINGS

<u>Type</u>	<u>Savings</u> <u>(\$000)</u>	<u>Relative</u> <u>Weight</u>
Military Personnel	138.3	1.00
Civilian Personnel	110.1	.80
Supplies/Materials	110.1	.80
Rent/Utilities	50.1	.36
Equipment	12.3	.09
Transportation	9.0	.07
Other	2.6	.02
Communication	1.6	.01
Travel	-1.4	-.01
Other Contractor	-90.1	-.65

Figure F-4-5

personnel savings can be a dominant consideration, and yet, often intangible. For example, is a savings of 15 civilian spaces really a savings when 66 vacancies existed prior to the realignment? Also, at McClellan, events such as the expansion of required courses, establishment of OSUT, and achievement of DA Management Improvement Actions tend to cloak any real personnel savings from the realignment alone.

5. Lessons Learned.

a. When relocating major organizations, personnel continuity is a critical, high-priority concern. The USAMPS was realigned with minimal impact on mission performance. This cannot be said of personnel continuity. Figure F-4-6 is a recapitulation of the number of USAMPS personnel who relocated from Fort Gordon to Fort McClellan. Of the authorized officer strength, only 39 percent were cleared for movement to Fort McClellan. The continuity of key officer personnel was further aggravated by retirement and senior service school selections. As previously addressed, the problem of civilian continuity necessitated overlap hiring and additional training.

PERSONNEL RELOCATING FROM FORT GORDON TO FORT MCCLELLAN

<u>Category</u>	<u>Authorized</u>	<u>Relocated</u>
Officer	183	78
Warrant	17	8
Enlisted	601	328
Civilian	<u>168</u>	<u>25</u>
Total	969	439

Figure F-4-6

b. Much of the effort prior to and during relocation was directed towards preparation of temporary facilities at Fort McClellan. Although the

economic cost of preparing temporary facilities pending completion of MCA projects was nominal, the cost in manpower diversions and management resources was significant. Obviously, the timing of the movement requires a trade-off between having MCA projects completed and attaining the benefits of relocation at the earliest possible date. A relocation is much simpler and easier if completed permanent facilities are waiting. Since years of time and effort were spent studying the realignment and making the final decision, one could question the urgency of relocating prior to the completion of facilities.

c. The departure of the USAMPS from Fort Gordon coincided with the arrival of Signal School elements from Fort Monmouth. Also, the arrival of the USAMPS at Fort McClellan filled a void created by the October 1973 disestablishment of the Chemical School. Concerning these events, the following comments are made.

(1) The socio-economic effects of the dual move were not determined. However, since neither community actually lost in volume of retail trade or taxable revenue, significant negative impact was not anticipated. For this reason, political pressures were minimal.

(2) Manpower savings in Fort Gordon's BASOPS support were not determined and cannot be compared to any projections contained in the USAMPS CSJF. Savings, if any, are believed to be minimal.

d. When a CSJF is prepared, budget and manpower data are adjusted to reflect a base case for analysis purposes. It becomes very difficult for gaining or losing installations to identify costs and savings resulting from the action. This is especially true when one considers mission changes, manpower shifts, inflation, or other actions that may be affecting the installation during the same period. Various manpower and budget reports for Fort

Gordon and Fort McClellan reflect the dynamics of the installation during the periods of realignment--not the static adjusted base case used in the analysis. Figure F-4-7 illustrates this point by displaying the civilian manpower turbulence at Fort Gordon. The shifts in manpower alone appear to disguise the impact of the USAMPS relocation. Because of the disparity between actual and CSJF data, the costs and savings of a realignment action cannot be determined unless the actual data are artificially modified to reflect base case conditions.

6. Conclusions.

a. The movement of the USAMPS from Fort Gordon to Fort McClellan appeared to be well planned and executed. Lessons learned were published in advance and used throughout the implementation process. The decision to implement the action was not only based on economic reasons but on the desire to establish a permanent home for the USAMPS.

b. The description of actual events is based solely on after action reports. The age of the action, the many changes that occurred during the period of relocation, as well as the structure of the finance accounting and reporting system, make it impossible to reconstruct the actual costs and savings incurred exclusively by the realignment.

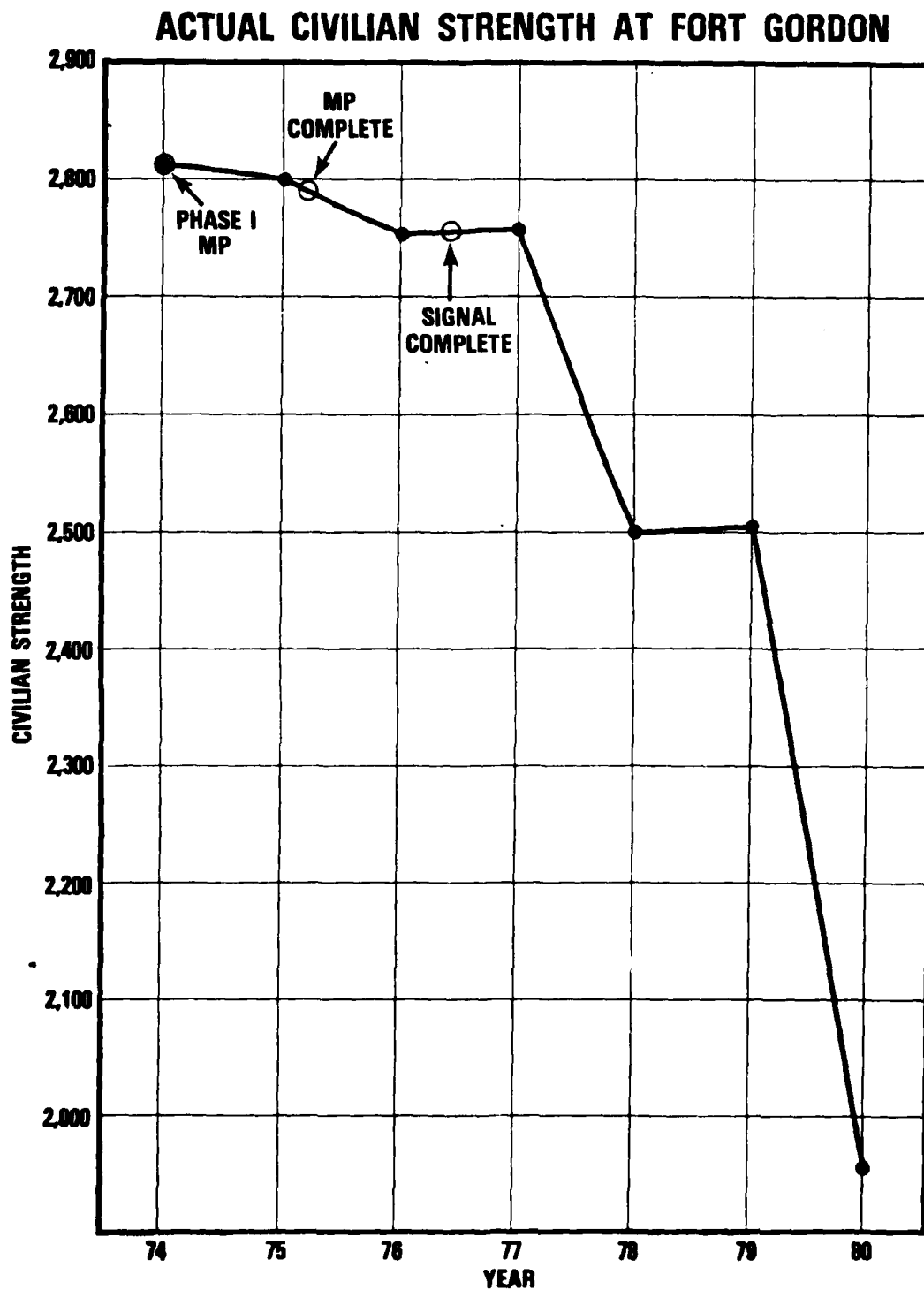


Figure F-4-7

LAST PAGE OF APPENDIX F-4

APPENDIX F-5

CASE REPORT--PUEBLO ARMY DEPOT REALIGNMENT

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1. Background--Description.

a. Reason. As part of Project CONCISE, DARCOM identified Pueblo AD as the primary candidate for removal of missile maintenance programs. Under-utilization of existing facilities and the introduction of newer and fewer missile systems necessitated reduction of manpower associated with missile maintenance activities DARCOM-wide. Missile maintenance was performed at five depots: Anniston, Letterkenny, Pueblo, Red River, and Tooele. All of these depots except Pueblo had primary maintenance missions for items other than missiles. DARCOM developed a Revised Supply Distribution Plan^{1/} for many

1/ DA, DARCOM, HQ, Revised Supply Distribution Plan.

depots and planned to implement it during the time frame of the missile maintenance transfer. The CSJF for Pueblo included manpower reductions attributed to missile maintenance and supply mission changes as well as BASOPS changes resulting from Pueblo AD becoming Pueblo AD Activity.^{2/}

b. Description of action. Pueblo would become a depot activity reporting under the command and control of Tooele AD. The two depot activities (Navajo and Fort Wingate) currently under the control of Pueblo would also transfer to Tooele. Personnel reductions would be made at Pueblo for missile maintenance, supply, and BASOPS missions. Tenant activities (HSC and USACC) would also have personnel reductions. The Pueblo action would take place in several phases.

(1) The missile maintenance mission for all systems except Pershing would be transferred to Letterkenny in FY 76. This action would reduce 859 civilian and 32 military positions at Pueblo and transfer 69 civilian spaces to Letterkenny.

(2) Pueblo was assigned the mission of converting all basic Hawk missile systems to I-Hawk. On completion of the conversion, all maintenance for the I-Hawk systems would be transferred from Pueblo. This was expected to occur at the end of FY 77 and would result in elimination of 752 civilian spaces.

(3) As a result of the DARCOM Revised Supply Distribution Plan, Pueblo would retain a reduced general supply maintenance and ammunition workload. Red River AD would receive 136 civilian spaces.

^{2/} DA, DARCOM, HQ, Project CONCISE, The Logistics Base, Pueblo Army Depot, Pueblo, Colorado (PUAD-ALT). (Abbreviated to Pueblo CSJF in subsequent references.)

(4) Tooele would receive nine civilian spaces to support additional BASOPS responsibilities incurred in assuming command and control of Pueblo, Navajo, and Fort Wingate.

c. History of action. The Secretary of Defense announced a series of base closure/reduction actions in November 1974.^{3/} Pueblo was included in that announcement. DARCOM had done much preliminary study and analysis in preparing the CSJF for Pueblo. Figure F-5-1 is a milestone chart for the Pueblo action. This figure shows major events prior to the closure announcement in November 1974 and some that happened as Pueblo was being converted from depot to depot activity status. Note that there is much effort along with milestones prior to the closure announcement. Once the decision was announced, there was opposition from the local community and its Congressional representation. A court case was introduced to challenge the validity of the closure/reduction decision under the NEPA of 1969. In dismissing the suit, the court interpreted NEPA as being concerned primarily with actions that impact upon the physical resources of the nation and secondarily with factors affecting socio-economic considerations.^{4/} The Pueblo realignment did not racially discriminate against the plaintiffs nor did it violate NEPA. Note that the EAC was involved prior to the formal announcement of the decision for drastic reduction of the manpower authorizations at Pueblo.

2. Implementation.

a. Action taken. The implementation plan was dated March 1975, and it presented the necessary closure actions in great detail on a function-by-function basis. Figure F-5-2 is the summary job migration diagram for Pueblo.

^{3/} DOD, OSD and DA, SA, Base Closure Announcements.

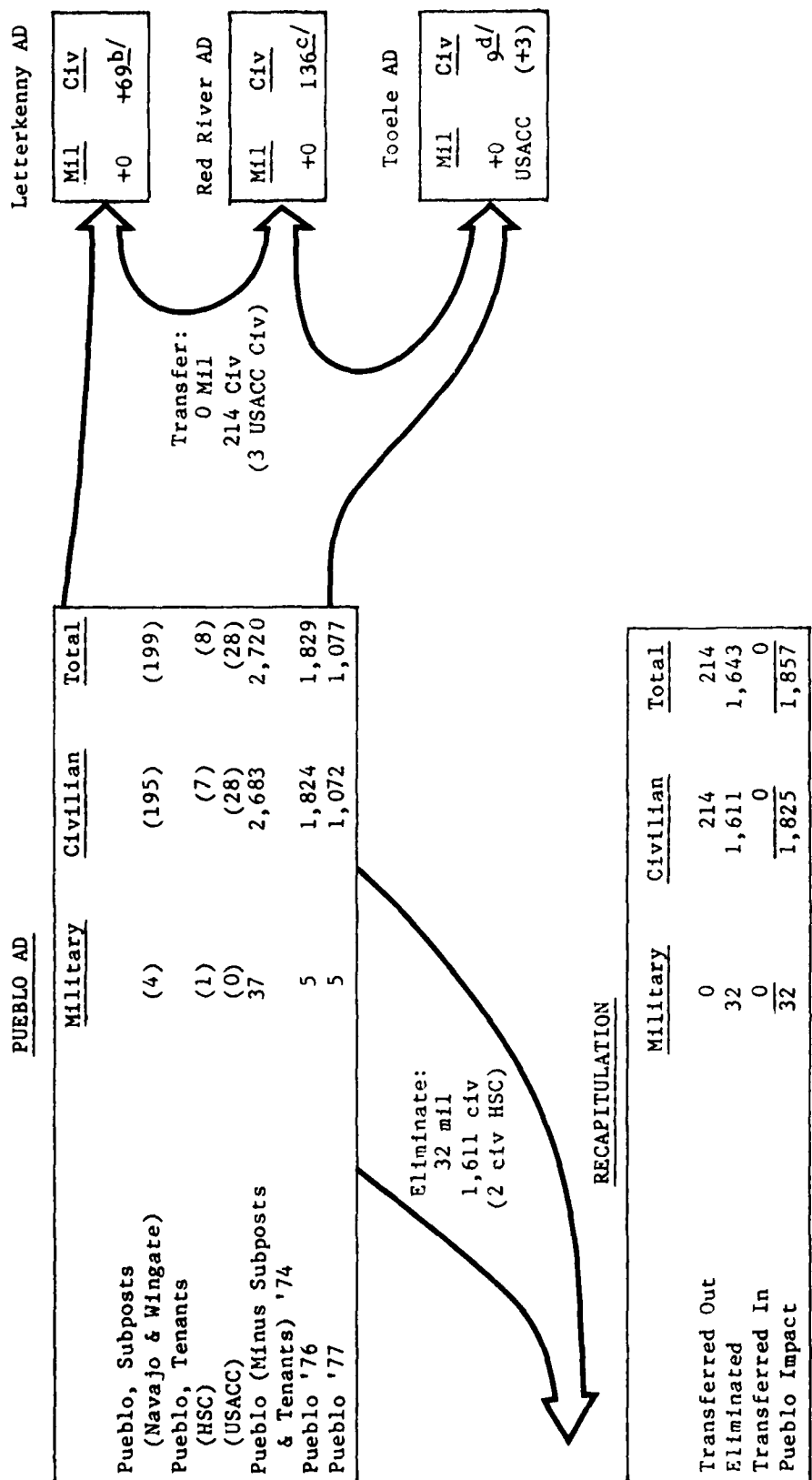
^{4/} DA, DARCOM, HQ, US District Court Dismisses Pueblo Realignment Lawsuit (memo).

MILESTONE CHART FOR PUEBLO AD REALIGNMENT

Major Events	Date Completed
Initiate Study/Define Objectives, etc.	February 1973
Depot Study Completed	April 1973
Notice of Intent to HQDA (CSJF submitted)	November 1973
Collect Study Data	April 1974
Compile Data	June 1974
Revised CSJF Format by HQDA	July 1974
Prepare Initial Documentation/Scoping for Alternative Case	July 1974
EA/FNSI	August 1974
MACOM Staffing	August 1974
EAC Community Impact Analysis	August 1974
USAAA Begins Audit	September 1974
Revision of Documentation	October 1974
HQDA Staffing and Announcement of Closure	November 1974
GAO Audit Requested	November 1974
Implementation Order Issued	December 1974
Local Community Objection	January 1975
Implementation Plan Completed	March 1975
GAO Audit Completed	July 1975
Court Case Filed	October 1975
Court Case Resolved in Favor of Government	May 1976
Pueblo Becomes Depot Activity	July 1976
Action Completed	October 1977

Figure F-5-1

JOB MIGRATION DIAGRAM--PUEBLO AD REALIGNMENT^{a/}



- a/ SOURCE: Pueblo CSJF.
 b/ In FY 76 to Hawk maintenance.
 c/ In FY 76 to supply redistribution.
 d/ In FY 77 to BASOPS.

Figure F-5-2

It is annotated to include some phasing information. Although there were some problems during implementation, the action generally proceeded according to schedule.

b. Comparison. Figure F-5-3 is a graph comparing civilian personnel data from the implementation plan with the actual civilian spaces at Pueblo for the period 1974 through 1977. A comparison of planned and actual civilian spaces confirms that the overall plan was generally followed. ESC made no attempt, however, to check changes in manpower authorizations on a function-by-function basis.

3. Economic Analysis. The Pueblo CSJF projected annual savings or cost avoidances of \$25.5 million after steady state was reached and one-time costs of approximately \$5.0 million (excluding MCA and FHMA needed to complete the realignment action). After the Pueblo action was initiated, estimates were audited by the GAO.^{5/} Thus, the cost and savings estimates were reviewed by an outside agency and found reasonable.

a. One-time costs. Figure F-5-4 is a summary table of Pueblo CSJF estimated one-time costs.

(1) DARCOM depots are AIF activities and have some cost code differences from the standard AMS codes used in the finance and accounting system. The AIF budgets, for example, do not track or account for military personnel costs.

(2) Major variations existed in estimates of one-time costs between the CSJF and the GAO data. ESC's after-the-fact reconstruction of data also revealed some differences within the CSJF between detail and summary

^{5/} GAO, Compt Gen of the US, Evaluation of the Phasedown of the Pueblo Army Depot.

ESTIMATED AND ACTUAL CIVILIAN POSITIONS FOR PUEBLO ARMY DEPOT CLOSURE ACTION

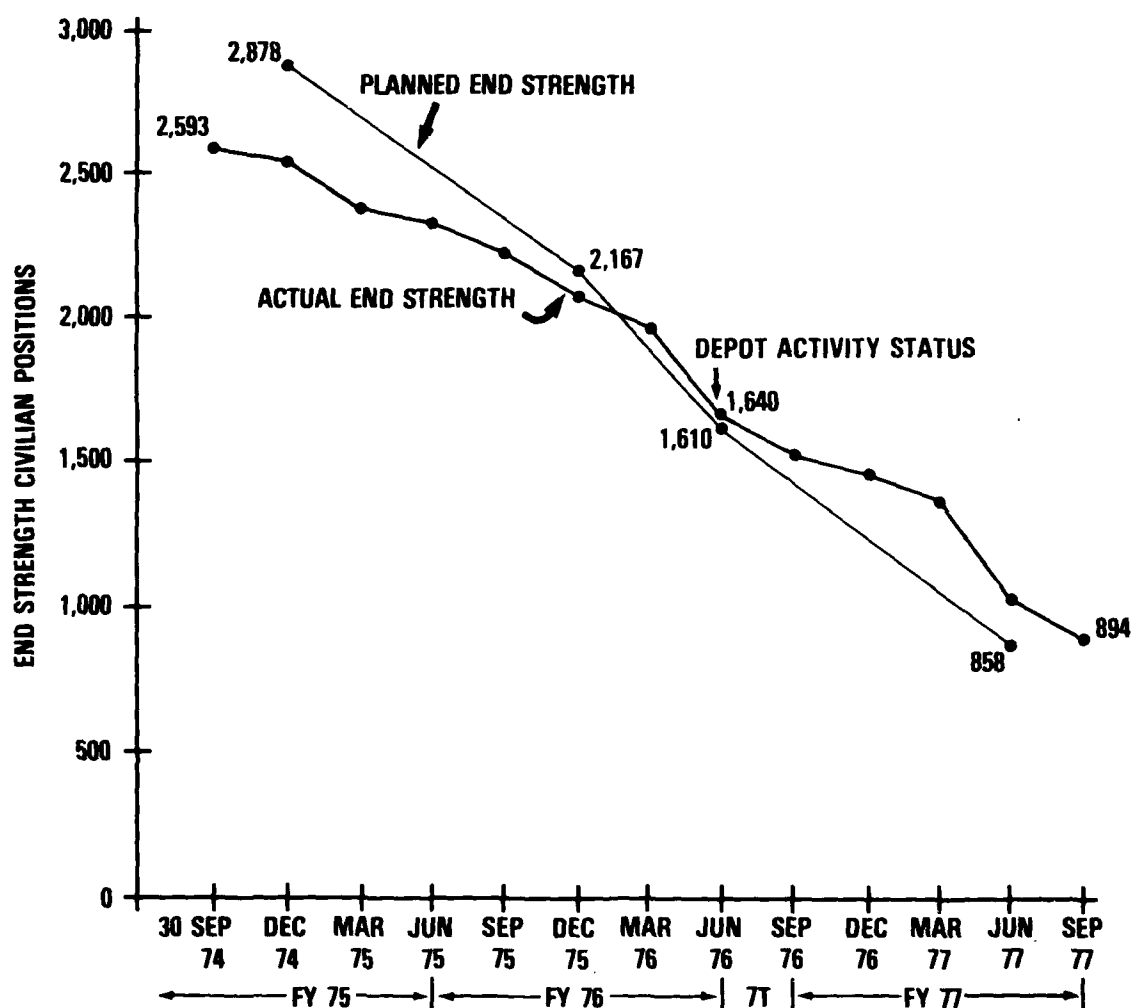


Figure F-5-3

COMPARISON OF ONE-TIME COST ESTIMATES FOR PUEBLO AD REALIGNMENT

Category of Cost	CSJF ^{a/}	GAO ^{b/} (\$000)	ESC ^{c/}
<u>Military Personnel</u>	37	--	37
Movement of Personnel	(8)	--	(8)
Movement of HHG	(26)	--	(26)
Dislocation Allowances	(3)	--	(3)
<u>Civilian Personnel</u>	3,961	4,665 ^{d/}	5,241
Terminal Leave Payments	1,388 ^{e/}	--	2,583 ^{e/}
Relocation Costs	(30)	--	(31)
Severance Pay	(3,931)	--	(5,210)
Other (Training at Letterkenny AD)	68	116	68
Movement of TOE/TD Equipment	0	5	?
Transportation of Supplies & Equipment	0	36	?
Cost to Put in Activity Status	317	317 ^{f/}	317 ^{f/}
Homeowners Assistance Payments	350	350 ^{f/}	350 ^{f/}
Other (Gap in Production)	230	220	230 ^{f/}
Unemployment Compensation	--	3,448	--
Extra Travel	--	20	--
Total	4,963	9,177	6,243
Net Cost/Savings Facilities	-1,205	-1,355	-1,205
Total Cost of Realignment	2,318 ^{g/}	7,822	5,038

- a/ Pueblo CSJF.
b/ GAO, Compt Gen of the US, Evaluation of the Phasedown of the Pueblo Army Report.
c/ ESC reconstruction of one-time costs.
d/ Military and civilian costs combined.
e/ Nonadditive.
f/ Not checked.
g/ As reported.

Figure F-5-4

AD-A103 962

ARMY ENGINEER STUDIES CENTER WASHINGTON DC
ARMY BASE REALIGNMENT METHODOLOGY, VOLUME II.(U)
AUG 81 J M DAVIS, L A LANG, L W WRIGHT

F/G 5/1

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presentations. The major areas of difference were military personnel, civilian terminal leave payments, severance pay, construction costs, training costs, and unemployment compensation.

(3) Figure F-5-4 also is a comparison of the CSJF, GAO, and ESC estimates of one-time costs for Pueblo. GAO includes a cost for unemployment compensation; ESC made no attempt to track or estimate this non-DOD cost item. There were slight differences in other accounts.

(4) Figure F-5-5 summarizes actual one-time costs from Pueblo after action reports.^{6/7/} These costs exclude the impact of construction and any costs not incurred at Pueblo. The one-time costs totaled \$9.1 million, but the categories tracked do not permit a direct comparison to estimates made in the CSJF. A primary reason for this mismatch is that cost categories tracked or expensed by the AMS system do not align themselves with the management categories used in the CSJF preparation. No other data were found.

(5) Since estimated construction costs (essential and FYDP avoided) were small and their impact on one-time costs was minimal, ESC made no attempt to verify projects built or avoided as a result of the action. The GAO (\$1.355 million) and CSJF (\$1.155 million) estimates differed by only \$200,000 for this category. The one project actually constructed was a rehabilitation effort converting warehouse space at Letterkenny to maintenance space for \$44,643. This project was estimated in the CSJF at \$115,000 and by the GAO audit at \$60,000.

^{6/} DA, DARCOM, DESCOM, AIF Br, Army Industrial Fund Costs by Elements of Expense and Personnel Strength Data.

^{7/} DA, DARCOM, DESCOM, AIF Br, Concise Costs 1 Oct 76-30 Nov 76, 1 Oct 76-31 Dec 76, 1 Oct 76-31 Jan 77, 1 Oct 76-30 Jun 77, 1 Oct 76-31 Aug 77, 1 Oct 77-30 Nov 77, 1 Oct 77-31 Dec 77, 1 Oct 77-31 Mar 78, 1 Oct 77-30 Apr 78, 1 Oct 77-31 May 78, 1 Oct 77-30 Jun 78, and 1 Oct 77-31 Jul 78. (Abbreviated to CONCISE Cost Reports in subsequent references.)

ACTUAL ONE-TIME COSTS INCURRED AT PUEBLO AD^{a/}

Category	(\$000)
PCS	1,494
Severance Pay	365
Nonproductive Time	1,955
Nonproductive Employee	1,549
Overtime Differential	16
Administrative Support	364
Sick Leave	2,177
Equipment Turn In	819
Packing and Shipment, Other	37
Container Assembly, Other	4
Shipment, Other	6
Building Lay-away	91
Contractual Service	265
Transmission Line	3
Total	9,145 ^{b/}

^{a/} SOURCE: DA, DARCOM, Tooele AD, Project CONCISE (letter). Actual costs cover FY 74 through January 1978 and taken from AIF Budget.

^{b/} Pueblo CSJF estimate for one-time costs was \$4,963.

Figure F-5-5

b. Annual or recurring savings. The Pueblo CSJF estimated that the realignment would yield a net savings of \$25.5 million per year after steady-state conditions were reached. (Savings at Pueblo would approximate \$29.9 million, but cost increases at other installations would equal \$4.4 million.) The Pueblo CSJF projection assumes that there is no inflation and that there are no other mission changes imposed on Pueblo. (In order to accurately compare projected versus actual savings, inflation adjustments must be made to put all costs in 1974 dollars.)

(1) Assuming that there was no inflation and no other mission changes were imposed on Pueblo, a crude estimate of total cost differences at Pueblo obtained from actual reconstructed AIF budgets for FY 74 and FY 78

shows steady-state savings (cost avoidances) in the order of magnitude of \$23 million. (Calculations are shown on Figure F-5-6). Figure F-5-6 compares projected and actual AIF budgets for FY 74 and FY 78. Note that the figures for Pueblo in FY 74 are adjusted by subtracting an estimate of costs for Navajo and Fort Wingate. This adjustment was not necessary in FY 78.

COMPARISON OF RECURRING SAVINGS AT PUEBLO AD

AIF Budget Category ^{a/}	CSJF Estimate ^{b/}		Actual Budget Data ^{c/}	
	FY 74	FY 78	FY 74	FY 78
Salaries & Wages	33,169	12,533	35,307	16,215
Other Costs	15,181	6,888	14,011	5,670
Total Costs	48,350	19,421	49,318	21,885
Adjustments ^{d/}				
Navajo	-2,561	--	-2,561	--
Ft Wingate	-1,864	--	-1,864	--
	43,925	19,421	44,893	21,885
Estimate of Recurring Savings	43,925		44,893	
	-19,421		-21,885	
	24,504		23,008	

^{a/} AIF budget does not include military costs.

^{b/} CSJF estimate data are in constant FY 74 dollars.

^{c/} Actual data are in current dollars.

^{d/} Tenant activity costs were minimal.

Figure F-5-6

(2) Estimates of cost increases for Letterkenny, Red River, and Tooele ADs cannot be accurately isolated due to the impact of other actions taking place simultaneously. For example, Tooele AD was to receive nine civilian spaces from Pueblo for BASOPS missions. At this same time, however, Tooele suffered a workload reduction and had spaces transferred to Red River in the Revised Supply Distribution Plan mentioned in paragraph 1a. The impact

of the nine spaces from Pueblo could not be accurately tracked, and changes in the Tooele budget could not be ascribed solely to the small shift of positions from Pueblo. Correspondingly, tenant activity changes were not checked because they were too small to make significant impact.

(3) Neither DARCOM HQ nor Tooele attempted to estimate recurring costs or savings resulting from the Pueblo action. This was because at the time DA had no requirement to track either one-time or recurring costs and savings.

(4) Recurring costs or savings are very difficult to track because in most cases they involve money not spent. Estimates can be made based on assumptions, but audits are virtually impossible. Figure F-5-7 illustrates the difficulty involved in projecting and tracking cost avoidances. This figure uses actual AIF budget data from the Pueblo realignment and shows a range of projected savings estimates. The Pueblo CSJF estimate for recurring savings was based on the cost per man-year in 1974 (\$17,300) times the number of man-years (1,858) saved and equals \$32.143 million. However, this figure does not reflect inflated salaries of personnel and other changes in operational costs at a depot. The adjusted projection, including inflation, would be the cost per man-year in 1978 (\$24,530) times 1,858 or \$45.577 million. Is \$32 or \$45 million the best estimate for costs avoided? The actual documented savings obtained by comparing AIF budgets for Pueblo in FY 74 and FY 78 were \$23 million. A realignment that reduces manpower will yield savings, but the actual amount is difficult to document.

(5) Cost per man-year. The data used at Pueblo to account for the effects of inflation and mission changes during the period FY 74 through FY 78 are reasonable. Figure F-5-8 shows the costs per man-year at Pueblo and

the other DARCOM depots over the period FY 74-78. Note that Pueblo costs (even after the reduction) behave in the same general pattern as the larger depots.

PUEBLO AD REALIGNMENT DATA

Calculation	Type Savings	Total
\$/MY in '78 (\$24,530) x MY Saved	Adjusted CSJF	\$45.577 mil
\$/MY in '74 (\$17,300) x MY Saved	CSJF Not Adjusted	\$32.143 mil
AIF Budget at Pueblo '74 - '78	Actual Budget	\$23.008 mil

Figure F-5-7

COMPARISON OF COST/MAN-YEAR AT DARCOM DEPOTS

Depot	Cost/Man-year (\$000) ^{a/}				
	FY 74	FY 75	FY 76	FY 77	FY 78
Pueblo	17.30	18.73	20.24	25.06	24.53
Tooele ^{b/}	17.34	18.78	21.07	23.67	25.50
Red River	17.65	20.78	--	24.12	25.75
Letterkenny	16.26	20.13	--	25.58	26.87

^{a/} All data from AIF budgets and CONCISE Cost Reports.

^{b/} Tooele figures include Tooele and all its supported depot activities (Navajo, Fort Wingate, and Umatilla). Pueblo figures have been presented separately.

Figure F-5-8

4. Conclusions--Lessons Learned.

a. The age of the case (circa 1974-1977) made tracking of detailed data rather difficult. File reductions and other management practices dictate that as time passes, fewer and fewer historical items will be retained.

Details of past events are also lost from the memory of personnel who worked on the action (if they are still around).

b. The RRSR for tracking closure actions was not in effect for the Pueblo action. There was no requirement to follow up. Data in HQ DARCOM files did not permit quarter-by-quarter comparisons or even fiscal year comparisons for the closure action. (DARCOM did and still does require follow-up reports on progress against milestones outlined in the implementation plan.) The after action reports that were found were spotty and did not use consistent formats. Tracking of manpower spaces and dollars must be done during the action, or it will never be reliable.

c. There is not a direct one-to-one match between the AIF codes and the CSJF categories. Without this match, one-to-one tracking by category is impossible. For older cases, exhaustive research would not yield enough benefit to be worth the cost.

d. Construction costs and savings resulting from the Pueblo action were minimal. This probably is not a typical case with respect to construction impacts. The construction costs or costs avoided can be checked by using installation MCA records and FYDP references.

e. The majority of costs avoided or recurring savings come from personnel savings. Civilian manpower spaces can be audited in terms of authorizations, but the savings ascribed to them are largely a matter of conjecture.

f. Tracking costs for other installations receiving missions becomes very difficult. Changes from this realignment are obscured by other command initiatives, workload changes, and normal attrition. Without knowing all concurrent changes concerning a receiving base, cost changes cannot be solely ascribed to the actions mentioned in the CSJF.

g. The CSJF did not accurately treat the two depot activities originally reporting to Pueblo. Because budget and personnel allocations were being transferred in total with virtually no other changes, there should have been no impact on the costs and savings in the Pueblo CSJF. Yet the base numbers for Pueblo reflected dollars for the support activities (Navajo and Fort Wingate). The impact is that some assets were counted twice and estimated annual savings resulting from the action should have been lower.

h. Some aspects of the Pueblo action that did not materially affect cost and savings projections but could assume a more critical role to a decision-maker in 1981 are:

(1) Energy. Pueblo used primarily coal, natural gas, and hydro-power. The receiving base for missile maintenance was Letterkenny, which used primarily fuel oil. (GAO pointed this out.)^{8/}

(2) Minority employment. Over 50 percent of Pueblo's population was classified as minority (primarily Hispanic). While minorities were not disproportionately impacted at Pueblo, the action was large enough to have an impact on Army-wide statistics and goals.

i. Many realignment actions are management or workload driven. Pueblo was not the result of a desire to reduce facilities. Rather, it was the result of an attempt to accommodate a greatly diminished workload within the command. Proportional cuts to all installations were not the answer. The Pueblo CSJF included several workload shifts among installations in the command. The total shifts were large and caused adverse community impacts.

^{8/} GAO, Compt Gen of the US, Evaluation of the Phasedown of the Pueblo Army Depot.

j. Community impact is something that must be computed to comply with laws and regulations. Although it is unlikely that DA or DOD will reverse a decision to close a base because the community will be adversely impacted, they must do a lot of paperwork to show the action to be reasonable, responsible, and cost-effective. The EAC was created for the purpose of assisting communities. The work being done by CERL (EIFS Model) and the Air Force (LECS) to refine models of community impact should be sufficient for any reports needed in this area.

k. The EAC was active in helping Pueblo and Otero counties (Colorado) adjust to the Pueblo personnel reductions.^{9/} As of 22 June 1976, over \$4.5 million in Federal assistance had been given to the area. Two examples of such assistance were the establishment of a health education training facility and \$1.3 million for the construction of a sewerage and water treatment facility needed for construction of a meat-packing plant expected to hire 230-250 additional people.^{10/}

^{9/}DOD, OASD (I&L), Ofc of Economic Adjustment, Report of Economic Prospects for the Pueblo County and Otero County Region Colorado.

^{10/}DOD, OASD (I&L), Ofc of Economic Adjustment, Status Report on the Economic Adjustment Program in the Pueblo County and Otero County Region, Colorado.

APPENDIX F-6

CASE REPORT--SIGNAL SCHOOL CONSOLIDATION

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1. Background.

a. Reason for the action. Since early 1967, studies have indicated the feasibility and economic advantages of consolidating the Signal School at Fort Monmouth with the Southeastern Signal School at Fort Gordon, Georgia. As stated in the Realignment Fact Sheet, "Consolidation of the two schools at Fort Gordon provides greater efficiency in the administration and support of academic programs, access to adequate field training sites, and a year-round climate more conducive to the conduct of field training exercises."^{1/}

^{1/} DA, TRADOC, HQ, CONCISE Case Study Justification Folder, Signal School, Phase II, Revision. (Abbreviated to Signal School CSJF in subsequent references.)

b. History.

(1) In 1965 the "Haines Board," under the direction of General Ralph E. Haines, convened to examine officer education and training. The proposal of the board to consolidate the two Signal Schools at Fort Gordon sparked considerable interest from the news media, political leaders, and local civil officials. Any controversy at this time was short lived, however, because DA publicly announced disapproval of the action. The subject remained a dead issue during the Vietnam buildup.

(2) The Signal School move was resurfaced in February 1970 by the "Boatwright Committee" (Long-Range Stationing Study Group). The action met organized opposition in the form of a civilian employee movement, the "Save Our Signal School Association." Through the use of letters, newspaper advertisements, and public rallies, the association gained support for their cause. As the 1970 elections approached, opposition to the Signal School move became a popular issue among the candidates.

(3) In February 1971, Secretary Resor said "We do not anticipate implementing any action in the near future which would relocate the Army Signal School from Fort Monmouth." In this same year, Secretary of the Army, Robert F. Froehlke stated that he knew of no "immediate or long-range plans" to move the school. He did admit, however, that the economy may dictate the future of any Army service school. It is interesting to note that in April 1971 plans were being prepared to transfer six existing officer courses plus mission responsibility for one new officer course from the Signal School at Fort Monmouth to the US Army Southeastern Signal School at Fort Gordon.

(4) To the public, fears of a piecemeal move were being realized when, on 19 January 1972, DA approved the plan to transfer the seven courses.

DA news releases cited administrative efficiency and uniformity of schooling as reasons for the transfer.^{2/} This argument, however reasonable it seemed, did not pacify Congressmen who quickly capitalized on the disparity between the cost of the move and the savings realized. In response to political pressures, Undersecretary of the Army, Kenneth Belieu, promised an immediate in-depth review--which ultimately reaffirmed the decision.

(5) With the transfer of the seven courses to be completed by May 1973, events surrounding the consolidation of the two schools accelerated. On 24 November 1972, another Signal School CSJF for Realignment of Signal Activities, Phases I and II, was published. The Secretary of Defense announced consolidation on 17 April 1973, with actual implementation of Phase I beginning in June 1973. Figure F-6-1 is a milestone chart depicting events leading up to and including implementation of the Signal School move. A discussion of events subsequent to the initiation of implementation is contained in the following section.

2. Implementation.

a. Description of events.^{3/}

(1) Implementation of Phase I Signal Realignment began with the relocation of elements of the CDC Communications-Electronics Agency in June 1973 and elements of the Department of Army Wide Training Support in November 1973. Actual relocation of courses did not begin until third quarter FY 74, with the last course starting at Fort Gordon on 26 June 1975. Initially, 27 courses were scheduled for movement to Fort Gordon during this phase. This

^{2/} DOD, OSD, and DA, SA, Base Closure Announcements.

^{3/} DA, TRADOC, USASIGS, After Action Report Signal Realignment, Fort Monmouth to Fort Gordon. (Abbreviated to Signal School After Action Report in subsequent references.)

MILESTONE CHART--SIGNAL SCHOOL CONSOLIDATION

Major Events	Date Completed
"Haines Board" Recommends Consolidate Signal Schools at Fort Gordon	1965
"Boatwright Committee" CSJF	1970
Plan to Transfer 7 Courses Tasked	April 1971
DA Approves Transfer of 7 Courses	19 January 1972
CSJF for Realignment of Signal Activities, Phases I and II	24 November 1972
SECDEF Announces Consolidation at Fort Gordon	17 April 1973
Phase I Begins	June 1973
TRADOC Formed	1 July 1973
CSJF (Update)	21 November 1973
Relocation of Phase I Classes Begin	January 1974
CSJF (Update)	8 February 1974
Communications-Electronics School (Fort Monmouth) and Signal School (Fort Gordon) Formed	1 July 1974
Boatwright/CONCISE Update	17 September 1974
CSJF Revision	25 November 1974
Master Plan Phase II Developed	16 December 1974
CSJF Revision	20 December 1974
EIPO Formed	1 January 1975
CSJF Update	30 January 1975
Relocation of Phase II Classes Complete	26 June 1975
Suit Filed in District Court	10 December 1975
DA Receives Summons	7 January 1976
Phase II (Discontinued) Delayed by Court Case	23 April 1976
Phase II Complete	31 October 1976

Figure F-6-1

figure was later reduced to 16 by transferring the Air Defense Radar Repair Course to Fort Bliss, the Combat Surveillance Photo Equipment Repair Course to Fort Huachuca, seven audio-visual courses to Lowry AFB, and rescheduling two audio-visual noncommissioned officer/enlisted courses for Phase II.

(2) In reference to Figure F-6-1, the Army was undergoing a period of transition in the early 1970's. On 1 July 1973, TRADOC and FORSCOM were formed by a reorganization of Army forces in CONUS. In addition, plans were being prepared to transfer the USAMPS at Fort Gordon to Fort McClellan beginning on 1 June 1974. It is little wonder that almost continuous review and updating of plans occurred over the next few years. Among the reports and studies produced during this era were the 21 November 1973 Signal School CSJF (Update), the 8 February 1974 Signal School CSJF (Update), the "Boatwright"/CONCISE Update, the 25 November 1974 Signal School CSJF Revision, the 20 December 1974 Signal School CSJF Revision, and finally, the 30 January 1975 Signal School CSJF (Update). As a stabilizing factor, MG Myer became Commandant of both schools in October 1974 with overall responsibility for their consolidation. Phase II began with TRADOC approval of MG Myer's plan^{4/} of 16 December 1974.

(3) The Signal Realignment Master Plan was essentially an implementation plan. It outlined in detail the responsible activities that were to relocate personnel, equipment, and training materials from Fort Monmouth to Fort Gordon. The main effort of consolidation was performed by the Engineering and Installation Project Office, established as a TDA element at Fort Monmouth on 1 January 1975. Of the 44 courses relocating, 43 were consolidated

^{4/} DA, TRADOC, USASIGS, Signal Realignment Master Plan--Phase II.

at Fort Gordon. The remaining course was transferred to Keesler AFB for interservice training.

(4) On 10 December 1975, a suit was filed in the US District Court for the District of New Jersey on behalf of Government Employee Unions and local interest groups. The court action challenged the Signal realignment on grounds of environmental impacts. The plaintiffs contended that irreparable injury to the "human environment" would occur if the Signal School were relocated from Fort Monmouth to Fort Gordon. They felt that the move should not take place unless an EIS was developed in accordance with the 1969 NEPA. (The Army had performed an EA, but had not developed the more detailed EIS.) DA granted a delay in the realignment to allow conduct of a show-cause hearing. As a show of good faith, the Army held in place the status quo of all employees currently affected by the move. As a result, Phase II of the Signal School realignment came to a halt on 23 April 1976. The delay turned out to be only a temporary inconvenience. Court rulings vindicated the Army's decision that these socio-economic impacts were not of the type considered "human environment" under NEPA. The Federal Court of Appeals decision (Breckenridge versus Rumsfeld) has indicated that socio-economic factors are not to be the controlling consideration when evaluating a proposal under the NEPA.

(5) The transfer of courses during Phase II was based on schedules mutually agreed on by the two schools. Each course was transferred on a phase-in/phase-out basis. In other words, students in training at Fort Monmouth completed their training at that installation while incoming students for new classes began their training at Fort Gordon. Despite legal and political pressures, the consolidation milestones were completed on or ahead of schedule.

b. Personnel movement.

(1) Quoting from the 20 December 1974 Signal School CSJF as updated 30 January 1975, "The action [Phase II] will result in the reduction of 1,259 positions (722 military and 537 civilians) at Fort Monmouth. Of these, 438 military and 323 civilian positions will be transferred to Fort Gordon while 284 military and 214 civilian positions will be eliminated and made available for relocation to the Combat Forces." The Signal School CSJF also stated, "The total effect of all actions within the same time frame, including those apart from the basic action will result in the reduction of 1,484 positions at Fort Monmouth." Figure F-6-2 shows the summary of economic analysis--manpower as portrayed in the AAA audit.^{5/} The data presented in Figure F-6-2 correspond with the input used in the Signal School CSJF economic analysis. ESC research attempted to reconstruct CSJF calculations in light of events, but was unable to determine the reason for the rationale behind the CSJF claim of 1,259 positions saved. The "other reductions" (88 military, 88 civilians) seem to account for the nonrealignment actions taking place at this time. These actions include:

(a) The transfer of training functions to Fort Eustis, Fort Bliss, and Lowry AFB.

(b) Normal workload reductions and other changes not associated with Phase II.

(2) Figure F-6-3 displays the buildup of personnel at the Signal School, Fort Gordon and the corresponding decline of personnel at Fort

^{5/} DA, USAAA, TRADOC Area Ofc, East Central Dist, Audit of Case Study Justification Folder Signal School Phase II Revision Dated 20 December 1974, EC75-218.

SUMMARY OF ECONOMIC ANALYSIS--MANPOWER
(Signal School, Phase II)

	Dec 74 CSJF				Adjustment				As Adjusted			
	Spaces				Spaces				Spaces			
	Mil ES	ES	Civ MY	MY	Mil ES	ES	Civ MY	MY	Mil ES	ES	Civ MY	MY
Baseline Manpower	1,559	7,016	6,564		--	--	--	--	1,559	7,016	6,564	
After Realignment	693	6,398	5,960		--	--	--	--	693	6,398	5,960	
Annual Reduction	866	618	604		--	--	--	--	866	618	604	
Less Spaces Transferred to Fort Gordon	494	316	381		--	--	--	--	494	316	381	
Less Other Reductions	88	88	74		--	--	--	--	88	88	74	
Annual Manpower Savings	284	214	149		--	--	--	--	284	214	149	

Figure F-6-2

AVERAGE ON-BOARD STRENGTH

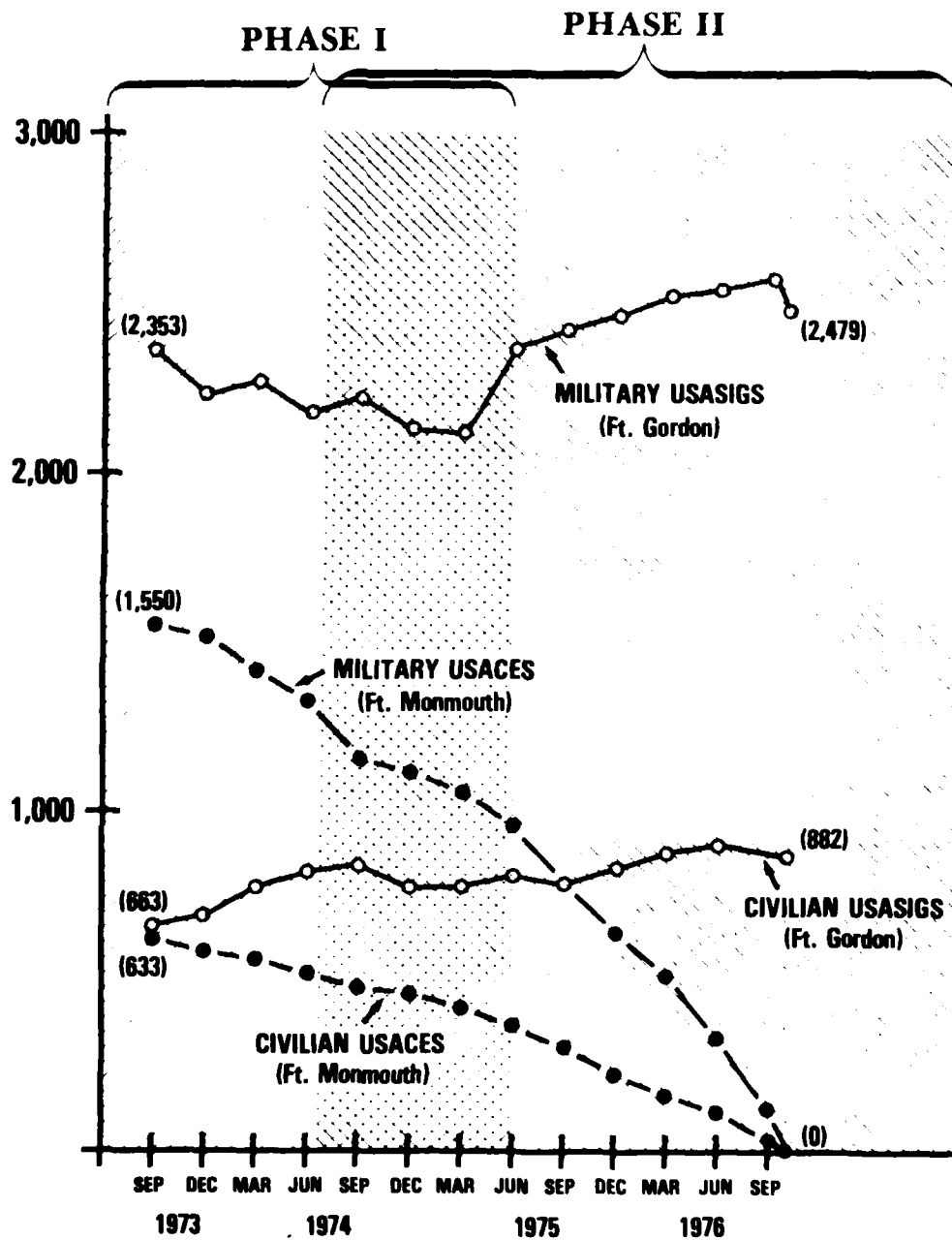


Figure F-6-3

Monmouth.^{6/} As courses were transferred to Fort Gordon, personnel requirements were identified and the TDA updated. Spaces no longer required were reported for turn-in on a quarterly basis.

(3) In many cases, courses overlapped at both schools. As a result, qualified instructors could not be reassigned to meet initial course start dates. In-house Signal School assets and DA fill of AIT graduates were used to alleviate the problem. To ensure that personnel authorized, but not on hand, had been requisitioned, course project officers provided a monthly personnel status report.

(4) Of the 754 civilian employees identified as having transfer of function rights to Fort Gordon, 84 elected to transfer. The majority of the remaining positions were filled without difficulty from the Fort Gordon labor market. However, some technical and professional positions were recruited from outside the commuting area.

3. Economic Analysis.

a. One-time costs.

(1) OMA. Figure F-6-4 is a simplified presentation of the one-time Signal realignment OMA costs as stated in the Signal School After Action Report. For comparison, the one-time OMA costs projected in the Signal School CSJF are Phase I--\$1,758,200; Phase II--\$4,535,200; Total--\$6,293,400.

(a) Referring to Figure F-6-4, the actual one-time cost incurred for Signal realignment amounted to \$3,557,400 or \$2,736,000 less than projected.

(b) Figure F-6-5 is a two-part table comparing details of projected and actual OMA costs. The top half of the figure lists FY 76

^{6/} Signal School After Action Report.

projected one-time costs as found in the Signal School CSJF. The bottom half lists OMA details as reported in the Signal School After Action Report for 1976. This particular year was chosen to isolate Phase II. Comparing estimated with actual FY 76 data reveals a projection of \$1,709,015 and actual expenditures of \$1,188,700. It is important to note that the account descriptions in the two figures are not necessarily the same. This makes a comparison of actual and projected costs more difficult.

ONE-TIME SIGNAL SCHOOL REALIGNMENT OMA COSTS
(\$000)

Year	Monmouth	Fort Gordon		Total
		Signal School	BASOPS	
73	4.4	9.0	1.6	15.0
74	178.0	121.5	61.3	360.8
75	498.5	1,204.0	88.4	1,790.9
76	257.6	917.5	13.6	1,188.7
77	--	202.0	--	202.0
Total	938.5	2,454.0	164.9	3,557.4

Figure F-6-4

(2) MPA. The Signal School CSJF (Phases I and II) estimated the one-time MPA costs to be \$1,671,400. No actual MPA costs were identified. The project officer completing the after action report felt that no additional MPA expenses were incurred by the Army as a result of the realignment. Perhaps this statement has some merit, since there was no change in Army end-strength, and officer reassignments may have been phased to mesh normal tour durations with course shifts.

ONE-TIME SIGNAL SCHOOL OMA COSTS FOR FY 76

<u>Category</u>	<u>Costs</u>
<u>CSJF Estimate Data</u>	
Terminal Leave Payments	96,531
Relocation Costs	360,346
Movement of TOE/TDA Equipment	192,801
EIPO Team	196,056
Transfer of Supplies/Equipment	500
Standby Status	246,665
TDY--Installation Team	433,050
TDY--Pre-planning Team	25,000
TDY--USACSA	72,483
Contract Drafting	9,000
Training Instructor Personnel	51,583
TDY--Pre-planning Team	<u>25,000</u>
Total FY 76 OMA	\$1,709,015
<u>After Action Report Data</u>	
Civilian Labor (EIPO Payroll)	257,600
Travel (Liaison Visits, Pre-planning, and Instructor Training)	6,500
Contractor Services--Reimbursement to Fort Monmouth and Fort Huachuca	842,600
Supplies and Equipment (Including BOM)	<u>82,000</u>
Total FY 76 OMA	\$1,188,700

Figure F-6-5

(3) MCA. The funds necessary to support construction and modification of facilities required by the Signal School realignment were requested through the Military Construction Program. Reprogrammed FY 73 MCA funds were approved for Phase I, while Phase II funds were approved in the regular FY 75 MCA Program. For comparison purposes, Figure F-6-6 displays the Signal School CSJF estimate versus actual costs and MCA estimates. It should be noted that Figure F-6-6 displays only a representative portion of the total required MCA projects--those for which comparable data were available. Follow-up reports containing appropriate actual information could not be located.

MCA COSTS ASSOCIATED WITH SIGNAL SCHOOL CONSOLIDATION

	CSJF (\$)	Actual (\$)	MCA Report (\$)
<u>Phase I</u>			
Academic Facilities	1,059,900	888,618.00	
Phase I Difference: 171,282 (-16.16%)			
<u>Phase II</u>			
EM Barracks Complex	4,492,000	3,614,730.20	4,492,420
Academic Facilities	1,156,000	748,943.50	935,000
Electronic and Electronic Maintenance Workshop	1,625,000	1,148,675.50	1,625,000
Printing Plant Addition	<u>233,000</u>	<u>232,484.52</u>	<u>233,000</u>
Total	7,506,000	5,744,833.72	7,285,420
Phase II Difference: 1,761,166.28 (-23.5%)			

Figure F-6-6

b. Recurring costs. When estimating actual recurring costs, one must adjust the Signal School CSJF estimates for inflation. Also, expenditures must be adjusted to reflect the conditions prevalent during implementation of the Signal School CSJF. The three subparagraphs below summarize an attempt to measure actual recurring costs and savings for the Signal School consolidation. This analysis was contained within the Signal School After Action Report and is paraphrased below.

(1) OMA. Estimated annual recurring OMA costs in the Signal School CSJF (\$63,464,000) were inflated to \$84,509,400 based on factors in the February 1976 edition of the TRADOC Resource Factor Handbook. FY 76 actual recurring OMA costs (\$68,663,200) were adjusted to \$79,063,000 to achieve comparability with FY 72 mission, workload, and staffing. Some of these adjustments were: increased mission costs due to workload increase (+\$11,472,400); decrease (-\$2,184,400) due to establishment of new hospital; and increase based on workload changes in BASOPS and other mission costs (-\$184,400).

(2) MPA. Signal School CSJF estimated MPA costs (\$68,886,000) were inflated using factors in the TRADOC Resource Factor Handbook to \$93,065,000. This was designed to achieve rough comparability with FY 76 actual costs. The FY 76 MPA costs (\$61,884,700) were adjusted to \$82,497,000 to achieve comparability with FY 72 mission, workload, and staffing. These adjustments accommodated increased mission costs due to changes in military strength (+\$23,687,000) and decreased costs due to new BCT mission and support incurred in FY 76 (-\$6,676,100).

(3) The Signal School CSJF estimated annual recurring savings (\$12,364,800) were adjusted as described above and resulted in the comparisons shown in Figure F-6-7. The primary reasons for adjustments were that less

than a year had passed since completion of the consolidation and that the ratio of military to civilian overhead staffing had shifted (between FY 67 and FY 72) from 61 to 39 percent to 63.5 to 36.5 percent.

COMPARISON OF ADJUSTED AND NONADJUSTED RECURRING SAVINGS

	OMA (\$)	MPA (\$)	Total (\$)
Estimated Savings in CSJF	8,282.5	4,082.3	12,364.8
Phase I	(2,102.4)	(2,091.2)	(4,193.6)
Phase II	(6,180.1)	(1,991.1)	(8,171.2)
Estimated Savings Upon Completion Of Move	5,446.4	10,568.0	16,014.4
Difference	-2,836.1	+6,485.7	+3,649.6

Figure F-6-7

c. Summary. Figure F-6-8 is a copy of "The Summary Of Economic Analysis-Cost" as contained in the AAA report.^{7/} The figure indicates that the AAA made no adjustments to any of the Signal School CSJF projections. Attempts to capture actual costs seem to indicate that the estimated savings were understated. In fact, the Signal School After Action Report indicated a savings of \$3,649,600 more than the amount projected.

4. Lessons Learned.

a. Complexity of the action. The Signal School realignment demonstrates an action that was complicated by several events. First, Phases I and

^{7/} DA, USAAA, TRADOC Area Ofc, East Central Dist, Audit of Case Study Justification Folder Signal School Phase II Revision Dated 20 December 1974, EC75-218.

SUMMARY OF ECONOMIC ANALYSIS--COST
(Signal School, Phase II)

Operation Costs	Economic Analysis (\$ Millions)		
	Dec 74 CSJF	AAA Adjustment	As Adjusted
Baseline Cost	146.4	--	146.4
After Realignment Cost	<u>122.0</u>	--	<u>122.0</u>
Annual Cost Reduction	24.4	--	24.4
Less Cost Transferred to Fort Gordon	12.6	--	12.6
Less Other Reduction	<u>3.6</u>	--	<u>3.6</u>
Annual Management Savings	8.2	--	8.2
<u>One-time Costs</u>			
Operating Costs	5.8		5.8
Investment Needed:			
Construction			
MCA	34.3	--	34.3
FHMA	--	--	--
Other	--	--	--
NAF	<u>--</u>	<u>--</u>	<u>--</u>
Total Construction Needed	34.3	--	34.3
Other	<u>--</u>	<u>--</u>	<u>--</u>
Total Investment Needed	40.1	--	40.1
Construction Cost Avoided			
MCA	14.3	--	14.3
FHMA	--	--	--
Other	--	--	--
NAF	<u>--</u>	<u>--</u>	<u>--</u>
Total Construction Cost Avoided	14.3	--	14.3
Total One-time Costs (Savings)	25.8	--	25.8

Figure F-6-8

II, each a separate action with a separate Signal School CSJF, overlapped in their implementation by about 1 year. Also, beginning with the transfer of seven courses in 1972, the turmoil of realignment continued for almost 6 years. During that time, reorganizations and political pressures were occurring at all DA levels. After action reports on the realignment covered the entire periods of Phases I and II, making the singular tracking of Phase II impractical. Second, several actions affecting staffing, missions, and workload occurred during this same period. Each of the following actions compounded the issue of tracking the realignment; yet they were not a part of the action. The complexity of any realignment action can be detrimental to the accuracy of post-implementation tracking.

(1) Functions were being transferred to Fort Eustis, Fort Bliss, and Lowry AFB.

(2) Increases and decreases were occurring because of normal workload shifts, relocation of the USAMPS, establishment of BCT, and the establishment of CST.

b. Time frame. As previously stated, the Signal School move extended over several years. As the length of an action increases, the ability to track that action accurately and reconstruct actual events and expenditures diminishes. Fortunately, there was an attempt to capture vital statistics at the time of implementation. Without that information, any after action analysis of the events would have been impossible.

c. Costs and savings comparisons. Wherever an individual expenditure could be compared to its estimate, the estimate was likely to be conservative. In other words, the projected costs appeared to be overstated. Only speculation could state whether or not this was by design. The dominant

one-time cost item was the facilities cost, while personnel savings were the dominant factors in recurring savings.

d. Personnel tracking. Since movement of the Signal School was based on course-oriented milestones, personnel were somewhat difficult to track. It was assumed that, if the particular course was completely transferred, the required personnel were also relocated. Given the difficulty of determining the projected number of spaces to be relocated, tracking the actual number was out of the question. Considering the assignment procedures of MILPERCEN, it appears more difficult to track a military space than a corresponding civilian space. Since no additional MPA expenditures were cited, the consideration of military movement in a transfer of this nature may be purely academic.

e. Available reports. Standard manpower and budget reports were inadequate to track estimates found in the Signal School CSJF. Although fluctuations in installation manpower and budget level could be recorded, their cause could not be isolated. Special reports, married to the forms in the Signal School CSJF, are necessary if one is to track the action.

5. Summary. The Signal School relocation from Fort Monmouth to Fort Gordon, despite the time involved and political pressures, was completed on schedule and realized more than expected savings. The fact that the realignment was implemented in two overlapping phases, along with other nonrelated events, created a situation which precluded verifying cost and savings.

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